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ORIGINAL LECTURES.

THE METHODS IN MEDICINE IN THE NEAR PRESENT.

Extracts from an Introductory Lecture to the 63d course at the Jefferson Medical College—Session of 1887.

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IN selecting a subject to lay before you to-night, I thought it might not be without advantage to bring together a few observations such as any one who watches the times can make and accept, on the methods in medicine likely to be the prevalent and fruitful ones in the near present. We live in a period of alertness and upheaval. Powerful forces are at work clearing new pathways, crushing obstacles, hewing in to rock here, building galleries there. Restless activity is undermining much of what is old, and asking if it be not better to sweep it all away, and to construct everything anew on different lines. Amidst all this bustle and din, it is well to stand for a moment aside to examine whither we are tending, and in how far the new results can be shaped into means of permanent use. If, in trying to group together some thoughts on the methods in medicine likely to prevail, I appear too sanguine of immediate effect from present work and thought, I beg you to reflect on the gigantic strides medicine has made since the beginning of this century, and how fair it is to presume that, with more workers and improving ways, we shall soon get even quicker and more decided results. Medicine, as we now see it, is almost a new science; scientific medicine, indeed, had scarcely an existence a hundred years ago. It was born with Harvey; but it slumbered until it awoke with Morgagni, with Auenbrugger, with Jenner, with Laennec, with Bichat, with Bright, with Charles Bell, cradling it and guiding its childhood.

The methods in medicine in the near present are certain to be based on the growth of knowledge in the fundamental branches, in anatomy, in physiology, in chemistry, in hygiene, in general pathology and morbid anatomy, as well as on its self-development by improved means of observation and by experiment.

Let us first take anatomy. Is it progressing, and what may scientific medicine further expect from it? The limitation of gross anatomy was, with few exceptions, reached long ago, and this has been fully recognized by anatomical teachers.

Yet, though it be true that gross anatomy is complete, we must ask for further service from the anatomist. We want him to teach with more precision and with a full recognition of its importance, regional medical anatomy, the anatomy of internal organs in their relation to parts around them likely to become implicated in disease and to the external coverings of the body. We also need accurate information as to nerve terminations and anastomoses, both in viscera and on the skin, and as to the courses of nerve fibres in parts of brain and of spinal cord. The great attention now given to nervous pathology and to the application of electricity calls for this; and while much of the anatomical work is done, it still requires definiteness and clearness to serve the purposes of the clinician.

The great advance in anatomy in this century has come through Bichat's work in general anatomy, and the study of microscopical anatomy which it ushered in. An insight has thus been gained not only into the character of tissues and their association, but a philosopical anatomy has been created, which, elaborated by great naturalists, by Agassiz, by Owen, by Leidy, has taught us to study the entire animal kingdom as a whole; to appreciate the relations of the same textures in the highest as well as in the lowest forms; and to view with ever-increasing wonder the admirable adaptation and design in Nature. It has done more. It invites us to extend our studies into one form, in the certainty that, the fuller we do so, the better we shall understand all. It has done yet more. It has aided us physicians greatly by letting us appreciate the kindred diseases of identical textures, no matter in what part of the body situated; and by explaining to us the similarity with which remedies affect these textures, whether they be in one or another organ. General with minute anatomy is thus acting on medicine by making it broader, more scientific.

How is physiology influencing medicine? (It is not for me to review here its general advances.) The study of functions is doing something to tell us how secretion, nutrition, and growth are brought about. But not enough of this knowledge has been gained to become a basis of scientific therapeutics. It may be ours some day; and with it may dawn an era in which disease will be modified or strangled at its birth. What physiology is now working out efficiently for us is the elucidation of the nervous system. The great problem of the functions of special centres in brain and spinal cord is being settled; and with this advance we have gained not only in disease recognition, but in disease cure. It seems marvellous to read in journal after journal of the day of more and more instances in which deft hands, acting in the light of correct appreciation of symptoms, made only possible by the physiological labors of Broca, of Ferrier and their followers, have removed tumors of the brain successfully, and saved lives. The knowledge which influences these actions will grow, and in the near present lead to the most brilliant results.

Chemistry is doing much for medicine. She is constantly adding valuable compounds; such as the bromides, the ethers, chloral, nitroglycerine have been found to be. She is extracting from well tried agents the active principles; such as atropine, hyoscine, aconitine. She is busying herself, as new plants are proved to possess healing properties, with isolating the valuable

and most available parts. She has already taught us so much of the character of the secretions, that we condemn one who does not avail himself of his test-tube as criminally ignorant or neglectful. But we still want from her simpler means for the ascertaining of the quantities of the ingredients in the secretions. We want ready methods for the sake of practical utility. And we ask that her work be brought into closer connection with bedside work; that we may understand not only the character of the secretions in a given disease, but the variations in them in the different phases of the same disease—knowledge which would be very valuable in foretelling issues.

Chemistry has entered upon a most hopeful search in the study of the poisons developed by decomposition. It is not only that these "ptomaines," which have been found in diseased or putrid meat and fish as well as in stale eggs and in cheese, explain the poisonous symptoms which we know these articles to occasion; but the alkaloids of decomposition occur also in the human body, there due to cadaveric change, or formed prior to death. The system through their presence may poison itself; and it is likely that by their study we shall get a solution more certain than we now have of the features of uræmia, of the brain disturbances of bad forms of jaundice, of venom poisoning, of the disorder in low and putrid fevers, and in many a state which we vaguely call blood poisoning. Who knows, too, but what we shall understand—what now we appreciate, but do not understand—how strong emotions, how love, fright, anger, or how excessive fatigue produce illness, doing so, perhaps, by developing in the altered secretions a poison disturbing the nervous system or corrupting the blood.

The physician in the times near at hand will be a very decided sanitarian. As it is, we are all sensible of the growing importance of hygiene. We know the value of sunshine, of fresh air, of open spaces, of pure water, of wholesome food, of appropriate dress, of cleanliness, of effective drainage, of thorough disinfection. We appreciate the use of innocent recreation. We feel the necessity of saving young lives from premature exhaustion by the drain on their unformed powers from overwork, especially from the senseless cramming into jaded brains of useless knowledge. We take heed of the exercise that soothes and refreshes, that fits mind as well as body for better purpose, and of the excessive devotion to it which injures both.

But we have still the task before us of making people generally understand all this; and at the task we must go with the aggressiveness of decided conviction. No faint words; no half-measures. Ignorance, cupidity, the obstructive, terrible force of inertia, must be made to feel that they have a deadly enemy at work in every member of our profession. Do you think it unnecessary to be so active? Listen to the report of a Committee to the American Public Health Association a few years since.[1] Of the whole number of deaths in the United States as ascertained by the census of 1880, not less than 200,000, or considerably more than one-fourth of them, were due to epidemic diseases. Measured by the known results in places exempted, by energetic means for their prevention, from the prevalence of epidemic diseases, if these means had been made general throughout the United States, 100,000 of the sacrificed host would probably have been saved. Listen also to these ghastly statistics taken from the recent writings of an eminent sanitarian.[1] They are more particularly concerned with childhood. "Children under five years of age," we are told, "are expected to die in what may almost be a definite proportion." Examining different countries, we find that of ten children born in Norway, only a little over seven attain their twentieth year; in England and in the United States of Amerca somewhat less than seven; in France, only five reach it; and in Ireland, less than five. What a record when we take into account that most of the diseases of childhood are preventable diseases, and that with a just hygiene they would be reduced to insignificant proportions.

But we need not despair of effecting much by sanitary means properly used. Let us look at results already accomplished by means as yet far from perfect. I will quote, as concerning us all most closely, some of the results obtained in our own country. In Michigan the saving of life from scarlet fever alone has amounted in the last eleven years to 3718. In Memphis, the drainage of which was some years ago in the worst possible condition, the death-rate has been reduced in six years from 35 in a thousand to 23.80 in a thousand; in Chicago, in the last five years, from 25.69 in a thousand to 19.46, a saving of 17,214 lives in that city during this period.[2] If then already something is done, how much more can be done by persistent and united effort. The medicine in the near present will be as largely a medicine of prevention as a medicine of cure. Let us trust that it will be even more so. Let us go on in our noble endeavors to be efficient preventers as well as efficient curers of disease. Let us go on with courage and devotion in the self-imposed task of teaching how to lengthen life and to add blessings to it. Let us go on with increased power presenting the splendid spectacle of a profession, earnestly and in its loftiness, striking at its own existence, and, for the common good, endeavoring with all its might to immolate itself.

Much of the advance in medicine of late years has been brought about by the study of general pathology and pathological anatomy. Neither receives in this country the attention it deserves. Yet it is the pathologist who develops into the best clinician. Morbid anatomy is certainly the very foundation of the recognition of disease; it is to the physician what anatomy is to the surgeon. But it is invaluable, too, to the surgeon. A great teacher recently gone from us, one whose sagacious words were so often almost reverently listened to in this very hall, the late Professor Gross, records, in his autobiography, the immense benefit morbid anatomy was to him as teacher, writer, practitioner, and bewails as one of the crying sins of the day its being taught in so few of our schools. But pathological science is cultivated with assiduity by some here and by many in Europe; in the medicine of the near present its full appreciation is certain, and its methods will be the approved methods of great progress.

[1] A. N. Bell: Public Health Papers and Reports, vol. x. 1885.

[1] B. W. Richardson: The Commonhealth, 1887. Essay on the Seed Time of Health.

[2] Rohé: Address in State Medicine before the American Medical Association, Chicago, 1887.

In general pathology there is just now the greatest activity, due to the discovery of minute living organisms in the body; many, indeed, are the speculations as to what these germs, these infinitely small bodies discernible only by the microscope, have to do with the production of disease. The speculations are not new; and standing in this place it is a pleasure to point to it, that one of my predecessors in the Chair of Medicine, Prof. John K. Mitchell, with rare sagacity and keen analysis, was among the very first to lead the way on this fruitful path of research. In relapsing fever, in tuberculosis, the influence of bacteria has been established; in many other, especially infectious maladies, we may fairly infer microbes to be the cause, or to play at least an important part. The whole medical world, dissatisfied with its knowledge of the causes of disease, particularly of communicable disease, is restlessly seeking out these little bodies of specific power. It feels that if it can be made a demonstrated truth that they are causative agents, not only will the mist of conjecture vanish and science henceforth walk in broad daylight, but that there will be hope of overthrowing disease at its very beginning, through means which vanquish its parasitic source. Indeed, already now "Death to Bacteria" is the rallying cry of many of the eager workers in curative as well as in preventive medicine.

Thus far, it must be confessed we have had, as regards internal medicine, no success in the search after agents which destroy the germs. The articles proposed are as apt to poison the patient as the microbe; some would be even more destructive; and none can be as directly and as completely brought into contact with parasitic life in the organs or in the blood, as surgeons bring them in contact in their antiseptic treatment of wounds and injuries. But must we despair of conquering these germs? It is not too sanguine to anticipate that if their paramount importance be fully established, the means for their destruction will be found. When has any discovery stood still? Look at the wonderful uses of steam, and remember what it was in the time of Watt. Recall the simple experiments of Volta, of Galvani, and of Franklin, and think what the great agency they found has become in these days of electric telegraphs, and electric lights, and electric railways, and of applications more dazzling than the imaginative creations of all the Eastern fairy tales. Reflect that life means progressive development, means the present and the future, not the past; and then venture to say that progress stops, and that it will be impossible to bring under control or to stamp out hosts of diseases by crushing their ascertained minute cause.

The whole science of bacteriology is still very young. The greatest practical gain has been to the surgeon, and in the better knowledge of disinfectants for the destruction of the noxious organisms outside of the body. In medicine we are still for the most part groping after the truth, hoping with it to find new lights, new means. And it is not certain that, in the glimpse we have caught of this bewildering microscopic world, we have reasoned clearly about its members. Are the particular microörganisms seen in special diseases necessarily the specific source? May they not be in some instances causative; in others simply the recipients and carriers of disease; in others again merely the followers or attendants on the unknown something that eludes our search? Further, is not their number as well as their presence important in producing morbid action? What we already feel the need of is not the mere accumulation of observations, but better appreciation of the relative value of the facts. We greatly want here what I may venture to call "scientific prospective;" and scientific prospective must be a method in bacteriology, if this promising science is to become the help we all hope it will be.

Thus far we have been regarding the tendencies in medicine, and the ways that will develop out of them in the near present, in connection with the general foundations of the science. But after all everything comes at last to the bedside for judgment on its worth; and the methods of observation by which clinical medicine has grown in the past will continue to be its chief sources of growth. The keen eye, the trained ear, the cultured touch, the collation of symptoms, the correct reasoning, the skilful adaptation of means of cure, will be the same in method; though new ways of obtaining more complete knowledge by the so-called instruments of precision, by the thermometer, by the sphygmograph, by the spectroscope, and, perhaps, by other instruments embodying physical discoveries of the day which have not been as yet adequately used in medicine, such as the telephone, the microphone, and the phonograph, will be more and more fully tested.

The great advance of our times is in therapeutics, partly through the results of suggestive experiment, partly by the more accurate appreciation of the action of drugs on the economy. Still, as in the past, clinical experience must be the final test of the value of remedies. Yet it is certain that the scientific methods now employed, will result in therapeutics simpler, and more effective in their simplicity. In the near present treatment will discard hap-hazard combinations, and aim at producing results with single remedies, or with remedies so adjusted that their combination brings out the full strength of the one most depended on, and reduces power in directions we do not wish it exerted, as witnessed, for instance, in combining belladonna or the bromides with opium. Again, local treatment is likely to be more and more resorted to. Will this make of medicine a mathematical science? Will it make the successful physician simply an accomplished physicist? Vain thought. Indeed, the methods, even those the outcome of the most conclusive experimental science and of the most perfect mechanical treatment, must ever take cognizance that in treating the sick we are dealing with the man in disease, quite as much as with the disease in the man. However more exact our means, however larger our resources, the personal something in the sick, the personal something in the physician will never cease to have their power. And the greatest success will always be with the greatest measure of tact, with the quickest appreciation of vital strength, with the magnetic influence which instills confidence and trust, with the fullest inspiration of hope, as well as with the courage that knows when to take risks and with the wisdom that knows when to rest.

A great deal of the improvement in Medicine, especially in therapeutics, is due to the knowledge that many diseases are self-limited, and to the appreciation of the course they run uninfluenced by medical means. This study of the natural history of disease is invaluable; and

giving us, as it does, a standard, it enables us to correct the claimed importance of special agencies, and to estimate at their true worth the vaunted cures of exclusive systems. It was through it that the protest of Young Physic against excessive and violent medication became effective. It was through it we began to comprehend the power of Nature. But it has done its work largely; and we must not stand still in that work. Young Physic has become middle-aged, and with its years has thrown off some of its youthful eccentricities. To go on now insisting on the supreme powers of unaided Nature, is to be as much behind the times as to continue in the constant use of disturbing, potential remedies, which the phase of medical inquiry alluded to did so much to discredit. Medicine has advanced, and has given us proved agents, alike for cure and for relief. In the near present the pandering to the belief many of the public still hold so dear, that Nature is all-powerful, that Nature must not be interfered with, will be looked upon as a sign of a weak, not of a sagacious mind. Those who seek counsel will rightly turn to him who knows the limits, while he believes in the resources of his art, and uses that art boldly; and not to him who sits down simply to see what Nature will do, and tries to throw the cloak of a philosopher over the shortcomings of a sluggard. New medicine condemns these posers as much as the old medicine they condemn.

We hear much of what Nature will do without assistance. Will she enable a man to walk with a broken leg? How often does she remove pus from the cavity of the chest? Will she arrest a peritonitis, or keep a perforated intestine quiet as efficiently as opium? Will she check the fierce onset of malaria like quinine; rally a faint heart like digitalis; or quiet the sleeplessness about to end in fatal exhaustion like chloral? Let us stop the prating about the unlimited power of Nature, and of not interfering with her processes. The same Providence that gave the power is daily letting us find more and more means to help it, when weakened; to repair it, when stricken. It may be in individual maladies still the best course not to attempt radical interference, since the measures to overcome them have not been as yet discovered. It is often impossible with our present knowledge to do otherwise than to husband strength and to allay disturbing symptoms. Each generation will re-examine and determine for itself, in the light of new helps, its influence over particular affections. A generation that has witnessed the introduction of the hypodermatic syringe, of the bromides, of chloral, of nitroglycerine, of cocaine, of antiseptics, need not despair of gaining more agents potent for control.

We are in an era in which Surgery is becoming the adjunct of medical therapeutics, or acting where Medicine cannot act. How far this is to go, time alone can determine. Before many years what can be safely attempted, and what cannot, will be fully known. But from the mode of procedure good has come. The history of intestinal obstructions and of peritoneal abscesses is the history of advancing success. Extirpation of brain tumors shows alike the increased skill in the recognition of disease and in its treatment. The indications for tapping the chest and the pericardium are becoming better and better defined. The removal of growths in the larynx cures cases beyond the reach of Medicine. The extirpation of enormous diseased spleens has been in some instances successful. There is, of course, risk that the daring efforts and glowing anticipations of surgeons may lead to attempts wh ch cannot possibly succeed. But the method is a method of advance; a method to be used when medical art fails. As internal therapeutics grow in resources, let us hope that the instances of employing surgical means will become fewer. Yet in the near present they will be used, and, assisted by the new and growing surgery of antiseptics, with probably increased ease and surer results.

The practice of the times we are approaching will then be simple, accurate, decided. The leading men of the day show these traits strongly. It will still require on the part of all much labor to attain this simplicity, this accuracy, this decision. It will require continuous work to sustain it; and, with these methods predominant, many a type, many a familiar figure will be seen no more.

In justice, I cannot leave my subject without taking some notice of what the position of Medical Instruction is to be, to keep pace with the improved methods to which we are attaining. It would lead me far beyond my limits to examine this question in detail; but it is evident that Medical Teaching must conform to the spirit and aims of the developing science. It will lay more and more stress on laboratory work, on bedside instruction, on clinical exercises, on personal training. It will do more and more, what I believe this College was the first, certainly in this country, to do, aim at breaking up the class into small sections for special instruction, so that everyone may have the opportunity to learn for himself under skilled supervision. It will, as studies advance, encourage to thoughtful, independent work with scalpel and in the laboratory; that kind of work which caused Soemmering, while a medical student, to earn from famed anatomists like Camper and Monro enthusiastic praises for his researches on the nerves at the base of the brain; the kind of work which Black, at the age of twenty-four, announced in his graduation thesis, revolutionizing Chemistry and paving the way for the great contributions of Lavoisier; the kind of work which led Koller but a year or two years since to discover the properties of cocaine; the kind of work which—I say it with feelings of just pride—is about to bear fruit in the publication of a volume of original essays on remedies of indigenous growth, containing a number of the investigations of our students in the laboratory of the Professor of Therapeutics. Progress in Medical Instruction will lop off many unnecessary studies, followed more particularly in some of the schools of Continental Europe, and having only a remote connection with medicine. It will require of all who engage in professional study mental training; but it will not too narrowly specify the kind of training, allowing the broadest limits in proof of mental aptitude. It will aim quite as much at educating in the methods of work as at mere supply of knowledge. It will lead to freedom of study; stop the wearying system of constant, so-called progressive examinations, which are regarded as tests of fitness to pass from one branch to the other; and will make one examination—the final one—sufficient, no matter when or how the knowledge has been acquired.

Will advancing methods in teaching dispense with lectures? "Lectures, sir!" said Dr. Johnson, "what

man would go to hear that imperfectly at a lecture which he can read at leisure in a book?" Lectures of the kind referred to—mere recitals without demonstration—enlightened instruction will forego. It will insist upon lectures which are not simply what can be read, upon those which address the eye as well as the ear, upon teachers that are not mere talkers, and if one of this class be found in position, public opinion will call for his removal.

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ORIGINAL ARTICLES.

THE PROGNOSIS OF CÆSAREAN OPERATIONS.[1]

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If it were proposed to a physician to beat out the brains of a newborn living infant with the view to diminish the perils of the puerperal period, the proposition would certainly be rejected as too horrible for consideration, even though the physician was convinced that the theoretical grounds for the recommendation were correct. Yet there is a disposition to treat any hesitation to destroy the unborn child in the maternal interest as pure sentimentality.

I must confess that I have never felt satisfied with this bit of curiosity, and I am sure that for the bulk of the medical profession nothing can be more welcome than to learn that there is statistical evidence sufficient to warrant us in a very considerable proportion of cases to decline, equally in the interest of the mother and the child, to lend our aid or countenance to the sacrificial operations of midwifery. By statistical evidence I do not mean bare records of deaths and recoveries, but a careful study of recorded cases, deductions from which are rational, and furnish the safest guide to scientific practice. It has been objected to the old statistics that they contained an undue proportion of favorable cases, and it may be a fact that a large number which ended fatally were never recorded; but on the other hand, some years ago I took occasion to analyze the histories of cases upon the death list, contained in the collection published in 1832 by Michaelis. They all belonged to the nineteenth century, and have been included in all the statistical tables that have since been published. In thirty-four the histories given were tolerably explicit. In one of the instances the operation was performed upon a corpse, and in the others upon dying women, or under circumstances which reduced the chances of success to a slender possibility. No wonder, under such conditions, Mauriceau, speaking of the Cæsarean section, declared, "If it is true that any women have escaped, it was the work of a miracle, or the express wish of God, who, if he wills it, is able to raise the dead, as he did Lazarus."

But the operation is not of necessity a fatal one. As regards the Cæsarean section in this country, it is presumable that few, if any cases have escaped Harris's vigilant inquiries. In a personal communication from him, I learn that up to date there have been 153 cases with 56 recoveries. This is undoubtedly a most discouraging report, but the percentage of recoveries should certainly teach us that the operation is capable of betterment by human ingenuity. It was until lately too much the fashion to quote the statement of Baudon, made in 1873, that there had not been a successful case in Paris in eighty years, and to ignore the results of individual operators. Thus Winckel, Sr., practising in a poor community where osteomalacia prevailed, in 15 operations saved 7 mothers and 8 children; Hœbicke operated 16 times with 11 recoveries; Maslieurat Lagemard, operated six times, and all his patients recovered. Découéne, of Courtrae, operated six times, and saved five women and four children, and Harris has been able to report 19 cases in Louisiana with 14 recoveries. In all these instances the operations were performed not in infected hospitals, but in the pure air of the country. Again, Dufeilthay's statistics showed 81 per cent. of recoveries, where the operation was performed before the mother became exhausted, and Harris has shown that under similar conditions in America, 21 out of 28 patients recovered.

These facts have, indeed, become sufficiently familiar, but they have been so persistently ignored by the anti-Cæsarean school in its polemic, that it becomes necessary to reiterate them in the rebuttal evidence offered by Cæsarean defenders. They show that the old operation when performed under fitting conditions, in a healthy locality, and with sufficient skill, has had a fair measure of success. Barnes claims for the alternative operation of craniotomy in extreme degrees of pelvic deformity precisely the same pre-requisites. "Obviously," he says, "we cannot recognize fatal cases of craniotomy in extreme deformity, unless the operation was begun under selected circumstances—that is, before exhaustion had set in, and conducted with due skill and after approved methods."

But in spite of the testimony favorable to prompt action, Harris has recently reported that during the last seven years in this country, in 27 operations only 5 women and 10 children have been saved, and the enemies of the Cæsarean section have pointed to these results as showing that it alone of all the departments of abdominal surgery has profited nothing by modern science. Without question it is, however, the preaching of those, who go around crying woe, woe! that is responsible for this melancholy decline. The operation ought never to be regarded as one of last resort. If the patient is dying, it is the duty of the physician to secure euthanasia, and not to make the death-bed the field for surgical display.

In marked contrast with the poor success attained in late years by operators in this country, Harris[1] has recently reported with gentle irony the histories of nine women in advanced pregnancy, whose wombs were ripped by the horns of infuriated cattle, with the survival of five women and four children, and of six cases of self-inflicted Cæsarean section, in five of which the women recovered.

[1] Read in the Section of Obstetrics, International Medical Congress, September 6, 1887.

[1] Harris: Cattle-Horn Lacerations of the Abdomen and Uterus in Pregnant Women. Am. Journ. Obst., July, 1887.

I have spoken so far of the old operation, meaning thereby cases in which nothing was done, or inadequate measures were employed to prevent the subsequent gaping of the uterine incision. Under such circumstances in favorable cases closure was effected usually by an adhesive inflammation, which united the uterine to the abdominal walls. To this were due the favorable results when the Cæsarean section was repeated upon the same subject (8 deaths in 119 operations, Lundgren), as the operation then became virtually an extraperitoneal one. According to Sänger, only one instance is known where complete union took place throughout the entire length and thickness of the wound. Sometimes the cicatricial tissue extended the entire length, but not through the thickness of the incision, and was of a callous consistency; in others, the line of union was at points of extreme tenuity, disposing to hernial protrusions, and in subsequent pregnancies to the production of rupture; while in others again, union took place at intervals only with the formation of fistulous openings, communicating either with the abdominal walls, or with circumscribed cavities within the abdominal enclosure.

Strangely enough, even after these facts had become familiar, it was not immediately obvious that better union could be secured, and the dangers of the operation lessened by the employment of a proper suture. The belief prevailed that sutures were a source of irritation, and that the alternating contractions and relaxations of the uterus during the early days of the puerperal period practically destroyed their utility. So strong, indeed, are old prejudices that Porro's proposition to avoid the risks arising from gaping of the uterine wound by the removal of the entire uterus has very recently been regarded not as a clumsy device, but as a surgical necessity. Indeed, it has been in this country chiefly, where tradition exerts a feeble influence, that, prior to the appearance of Sänger's exhaustive monograph, the suture has had anything like a fair trial; and Sänger strongly reinforced his argument in favor of its employment by the successes obtained through its agency by Polin, Brickell, Jenks, and Lundgren. Of these Brickell is specially deserving of honor. For twenty years, in spite of sneers and ridicule, he insisted on the employment of the suture, and foresaw that the suture was destined to remove the Cæsarean section from the category of happy-go-lucky expedients to the level of a legitimate surgical procedure.

But, however others may have contributed to the foundations, it has been the glory of Sänger to crown the work by indicating with precision the manner in which the vast experience acquired of recent years in abdominal surgery could be made available for the rehabilitation of the Cæsarean section. Leopold, the first to test the improved method, has now operated 13 times with 12 recoveries, and in Credé's clinic there have been 7 operations (4 by Sänger) with no deaths. These figures represent the possibility of the operation. In Leopold's fatal case the cervical dilatation had been prevented by old cicatrices. Cæsarean section was performed after twenty-seven hours of hard labor. The lower uterine segment was bruised, inflamed, and œdematous from long-continued head pressure. Death was due to peritonitis. In similar cases Leopold now advocates the removal of the injured organ by the method of Porro.[1]

These results sustain the dictum of Sänger, that the Cæsarean section, supplemented by deep and sy mperitoneal sutures, is devoid of danger if performed before the exhaustion of the patient—before the occurrence of infection—and in consonance with the principles of antiseptic surgery.

In Credé's last report (Mittheilung aus der Geburtshülflichen klinik, in Leipzig, Arch. f. Gynäk., vol. xxx. p. 328), the number of patients operated upon by Sänger's method was increased to 50, with 36 recoveries, and 14 deaths. Since then there have been published 6 more cases, viz: those of Döderlein, Perret, P. Bar, Lusk, Parrish, and Ohage. Of these the first four ended in recovery, and the last two in death. The total mortality thus far is $28\frac{4}{7}$ per cent.; but America furnishes seven cases, with but one recovery. If we deduct these, the mortality falls to $20\frac{20}{49}$ per cent. It is, therefore, particularly becoming in us, as chief contributors to the death-rate, to inquire into the causes and complications that have led to the fatal endings. The results of such an investigation are very interesting.

1. GARRIGUES. *Am. Journ. Obst. Case of lumbo-sacral kyphotic pelvis.* The patient had caries of the sacrum and lower vertebral, with synostosis of left iliac joint, contraction of left knee, and talipes equinus. She had had hæmoptysis, and was suffering from cystitis and vaginitis. For a month previous to operation the patient rarely left her bed, and suffered from nearly constant vomiting, and had to be nourished from time to time by enemata. Owing to ante-partum hemorrhage, she was, at the time of the Cæsarean section, weak and suffering, pulse 124, lips blue, and with cold hands and face. It was not thought by those in attendance that the patient could survive any operation. She lived 48 hours.

2. BEUMER. *Arch. f. Gynäk.*, vol. xx. p. 409. *Cervical myoma.* Patient had cystitis and pyelonephritis. Both kidneys were nearly destroyed. Death occurred in 36 hours.

3. KRUKENBURG. *Arch. f. Gynäk.*, vol. xxviii. p. 411. *Conjugata vera estimated at less than two and a half inches.* Patient a dwarf three and a half feet high, rachitic and scorbutic. She had been twenty-five and a half hours in labor, and was extremely feeble at the time of the operation. After the latter, hemorrhage due to complete atony of the uterus occurred. Death from collapse. Fasola, in a similar case of inertia, associated with grave internal hemorrhage following upon the performance of Sänger's operation, amputated the uterus. The mother recovered.[2]

In the following cases death resulted from exhaustion or septic infection due to extreme prolongation of labor. In all the indications for Cæsarean

[1] This plan he has since followed in a case where the uterus was infected at the time of the operation. The woman recovered. Leopold: Arch. f. Gynäk., vol xxviii. p. 120.

[2] Fasola: Gaz. delle Cliniche, Nos. 24 and 25, 1886.

section were indisputable at the outset. They in no sense illustrate the dangers of the operation, but rather the folly of postponing action until the seeds of death have been sown.

4. Münster. *Centralblatt*, 1886, p. 82. *Pelvic tumor.* Patient, after four days of labor, was conveyed to Königsberg, a railway journey of seven hours. Obstruction due to large pelvic tumor. Operation performed after four days of labor, twelve hours after rupture of membranes. Escape of fetid gas. Endometritis septica before operation. Death in four days.

5. J. R. Weist. *Med. Rec.*, March 13, 1886, p. 301. *Retrocervical myoma.* Operation four weeks after rupture of membranes, and nine days after labor had begun. Death in twenty-four hours.

6. Drysdale, *vide* Harris. *Amer. Journ. Med. Sci.*, October, 1885. *Retrocervical myoma.* Labor lasted two weeks. Septic infection at time of operation. Child putrid. Death in twenty-six hours.

7. Breisky.

Finally there remain a limited number of cases in which death was due to some defect in the antiseptic precautions.

8. Ehrendorfer. *Arch. f. Gynäk.*, vol. xxv. p. 128. *Fibroma of fascia, invading pelvic cavity.* Patient had had three living children, membranes ruptured at 3 A. M., on September 28th. At 4 P. M., on the 29th inst., Cæsarean section; escape of meconium into abdominal cavity. Ligature around left tube to prevent hemorrhage. Death in five days, from peritonitis purulenta ichorosa. Uterine cavity contained strips of decidua infiltrated with pus; with necrosis of tissue between the sutures.

9. Jewett. *N. Y. Med. Journ.*, August 29, 1885. *Uterine Cancer.* Profuse hemorrhages in latter part of pregnancy, constant pain, no sleep. Death from septic peritonitis forty-four hours after operation, infection probably due to case of erysipelas at the time in the hospital.

10. Ohage. Report received from Dr. Harris. *Conjugata vera under two inches.* Rachitic dwarf, labor induced; operation twelve hours later, when os was the size of quarter of a dollar. Death on fifth day from diphtheritic endometritis.

In addition to the above, Credé reports three cases communicated to him by letter, one operated upon by Neugebauer-Bieganski, of Warsaw, one by Bieganski, of Warsaw, and one by Morisani, of Naples, where the operation, though performed under apparently favorable conditions, was followed by death due to infection.

The more these cases are studied the more evident it becomes that the deaths were the results of preventable causes, except in instances where the operation was fatally handicapped by antecedent disease; indeed, the prognosis of the modified Cæsarean section appears to be favorable whenever performed with due surgical skill, and under circumstances which admit of surgical success.

As regards the saving of infant life, the results have been hardly less gratifying. In times past the anti-Cæsarean school has furnished statistical record showing a heavy infantile mortality associated with the operation, but in the fifty-six cases in which the Sänger precautions were employed only six children were born dead, and of these four were putrid at the time the operation was performed.

In Germany proper there have been thirty-five operations with the recovery of thirty-one women, and the saving of thirty-three children. In this country, in seven operations, there have been saved one women and three children. In view of this unflattering discrepancy it seems well worth our while to inquire in what way we can so improve our methods that our results may no longer give to the modern Cæsarean section a sinister aspect not justly its due.

Now, in the first place progress is not to be expected on our part until our professional men as a body make themselves familiar with the import of the various forms of pelvic obstructions, and learn to discriminate, during pregnancy, the conditions which indicate, respectively, the induction of premature labor, the Cæsarean operation, craniotomy, or a Fabian policy. Of course, the discussion of these and similar questions is not germane to my subject, but it may not be out of the way to note that craniotomy is not available in cancerous degeneration of the lower uterine segment and vagina, in obstruction due to fibroids and other tumors occupying the pelvic cavity, and in cases where the conjugate diameter measures less than two and a half inches. I do not pretend to claim that craniotomy furnishes no good results in these cases, but that the operator takes a gambler's risk, with the odds heavily against him. Even when the conjugate measures from two and a half to three inches the Cæsarean section still seems to me to be the preferable choice, as with those dimensions, unless the transverse diameter happens at the same time to be spacious, a most exceptional occurrence, craniotomy is extremely hazardous, requiring a complete obstetrical armament, and great experience on the part of the operator to enable him to avoid inflicting serious if not fatal injury to the tissues between the child's head and the pelvic brim.

To be sure, Barnes asserts that "craniotomy done under fair conditions, such as are postulated for the Cæsarean section—that is, done at a chosen time with due skill, does not involve any natural mortality," but a careful perusal of all his subsequent remarks shows that the statement was intended to apply to women with minor degrees of contracted pelvis only.[1] Merkel[2] reports 100 cases of craniotomy from the Leipsic Clinic, with 8 deaths. He congratulates the clinic upon results never obtained elsewhere. Thorn[3] reports 80 cases from the Halle clinic, with 10 deaths. How simple these cases were, for the most part, is shown by the fact that in Merkel's list of 68 multiparæ 49, and in Thom's list of 56 multiparæ 39 had previously given birth to living children.

[1] Barnes (British Gynecological Journal; part viii., 1866, p. 315) argues that by sacrificing the living child at term, the woman's life is saved, and subsequently, by the employment of premature labor, she becomes the mother of living children. But with less than three inches in the conjugate even premature labor affords but little encouragement so far as to hope for the preservation of the child.

[2] Arch. f. Gynäk., vol. xxi. p. 461.

[3] Thorn: Arch. f. Gynäk., vol. xxiv. p. 437.

Unquestionably defective diagnosis has so far in this country proved the most serious bar to progress in obstetric surgery. Every year I witness cases where horrible mutilations, due to ineffective attempts at delivery, have been inflicted before it was suspected that the obstruction was insurmountable. American woman have in times past enjoyed so large a degree of immunity from the more pronounced forms of dystocia, that our practitioners are too much disposed to regard Dame Nature as invariably kind to the parturient woman. Very few, indeed, attempt to realize the pernicious influence of spinal curvatures and hip disease upon the pelvic contours, or try to acquire the art of pelvimetry, and yet these belong to the A. B. C. of practice. A knowledge of them should constitute the difference between an educated physician and an experienced monthly nurse. This is delicate ground, and I do not refer to it in any carping spirit. I know that the lack of interest exhibited is due to a sense of the remoteness of the contingencies which will render such knowledge available. But more artificial modes of life, the pressure of population in large cities, and an unprecedented immigration are already working among us a perceptible increase in the causes of difficult labor, and with the departure of the old easy-going order of things comes the need of better equipment and an increased sense of responsibility on the part of medical attendants.

It is of good omen that Parish, armed with the weapons furnished by Harris's statistics, presented to the members of the American Gynecological Society, a year ago, a most eloquent appeal to give this subject their earnest thought and attention. I add my voice in the same direction from a sense of duty, and trust the time is at hand when all our leaders will lend their aid and advocacy to the work.

It is not to be expected that in every case, after a correct diagnosis has been made, and the necessity of the Cæsarean section has been recognized, that the practitioner should undertake the operation himself. It is not desirable that the Cæsarean section should be performed without assistants, without proper instruments, or without preceding orderly arrangements. Nor ought the operator to trust to the inspiration of the moment, but should possess at least a theoretical familiarity with every detail that experience has shown to contribute to the patient's safety. If the physician is timid, or is not so situated that he can operate under advantageous conditions, it will generally be easy, where the diagnosis has been made prior to the advent of labor, for him to entrust the case to an expert in abdominal surgery.

We have many laparotomists operating with brilliant results. They are not all upon the seaboard or in large cities, but are so scattered as to form centres accessible to extensive areas. They possess the experience, and needful preparation. With the general coöperation of our professional men, there is no reason why they should not rival the successes won in Leipsic and Dresden. They need, however, to open their eyes to the work of our neighbors, and to equip themselves for this special field of saving infant life. Mr. Tait has doubtless accomplished great good in teaching surgical means for the relief of tubo-ovarian disease, but it would be an added glory to our laparotomists, if they would on occasion round out their work of sterilising women by conferring upon them the blessings of maternity.

OBSERVATIONS ON THREE CASES OF SYMMETRICAL HAND AND FOOT DISEASE.

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THE cases reported below are given in brief but essential detail, with a view to illustration of one phase merely of the pathological condition which they are believed to represent, and which is described later.

CASE I.—C. S., aged nineteen years, a resident of Indiana, applied for advice on the 23d of May, 1887. He was an intelligent, bright-looking lad, then attending school. He used no tobacco in any form and denied all history of venereal disease. His father was living and in good health, fifty-four years of age; his mother the same, aged forty-nine. Four sisters were living and in good health. One brother died in infancy. One sister was married and had five healthy children. There was no history of cutaneous trouble in any member of the family. He gave no history of disease prior to the occurrence of the present ailment. All the bodily functions were properly performed. He stated that three years before the present date he noticed the first signs of his present disorder on the tips of the fingers. Somewhat later the toes were affected, and soon after that the palms of the hands and the soles of the feet. Since the beginning of his trouble the local affection had very slowly and gradually increased until the present condition has been reached. His complaint now is chiefly of stiffness and inflexibility of the hands and some soreness of the feet.

The state of the patient when examined was as follows: weight, 135 pounds, and gaining at the rate to be expected at his years. Vision, as tested by Snellen's types, in both eyes, normal. There was no sensori-motor evidence of disease of the nervous system. The hands and feet were symmetrically involved. The palms of the hands and the palmar faces of all the digits were the seat of a dense, inelastic, epidermal thickening, which had proceeded to such an extent as to render the complete extension of the digits slightly uncomfortable. The tylosis of the palmar surface of hands and fingers alike, was defined with tolerable clearness at the margins between the palmar and dorsal surfaces, to such a degree that the latter were, with only the exceptions noted below, exempt from involvement. Within the limits described, the sclerosis of the tissue was uniform and unbroken. The color of the palmar surfaces of the hands was markedly different from that of the plantar surfaces of the feet, having a reddish-yellow tint, somewhat suggestive of the diffuse eczema of the palms observed in certain mechanics, whose occupation has induced such disorder. He gave no history of other subjective sensations in connection with the local ailment than

pain and a sensation of stiffness. A few linear fissures near the thumb were productive of slight discomfort. There was no history of itching, nor of any pathological discharge from the surface.

All the nails of the fingers of both hands were similarly involved and apparently to the same degree. The free border of each, which had evidently been carefully trimmed short, was tilted away from the axis of the phalanx; and in the angle thus formed, in consequence of a species of onychauxis, appeared a yellowish-white and irregular stratum of horny material. The body of the nail was manifestly thickened and its transverse diameter apparently increased. The nail-substance itself was dry, friable, rugous, and destitute of the normal polish. When closely questioned upon this point he stated that his nails were thicker and dryer than before, that they fractured with unusual readiness, and were on that account particularly tender. He had within a short time noticed some sweating of the hands, a circumstance which until lately had not attracted his attention.

Both feet were cold and damp, and were the seat of a slight bromidrosis. The sole of each, with the exception of a narrow portion contiguous to the instep, was the seat of a uniform, smooth, firm, inelastic tylosis, which spread irregularly upward around the point of the heel, and involved to a less degree, the plantar faces of the distal phalanges of the toes. The color of this indurated and thickened epidermis was a whitish-yellow, strongly suggestive of the hue of wet wash-leather. The coldness and dampness of the organs were not limited to the regions affected by the tylosis, but were not noticeable over the entire surface.

All the nails of the toes of both feet were involved in an onychauxis, precisely similar in character to that described in connection with the fingers. The nails were tilted up at the free border from the nail-beds, and between the two lay a substratum of sclerosed epidermis. The nails were lustreless, rugous, transversely enlarged, and cut short on account of their undue friability. The soles were the seat of a moderate anæsthesia.

The pulse was registered at 84 per minute. There was no history of headache or backache, no cardiac murmur, and no marked deviation from the normal standard in the tendon-reflexes.

CASE II.—N. B., female, unmarried, aged twenty-four years, lymphatic temperament, a servant by occupation, was first brought to my clinic from the County Hospital, where she had been a patient for several previous weeks in the spring of 1884. She stated that her parents, two sisters, and one brother living in Scotland, were healthy and free from symptoms of her disease. She had been admitted to the hospital for relief of a symmetrical, recurrent tylosis of the feet, and failing to secure relief there applied elsewhere. Some months later, she was admitted to the Presbyterian Hospital and was under my observation in that institution till the spring of 1887. During all this time her physical symptoms were practically repeated in a recurring cycle of changes. About one year previous to her original admission to hospital, she first began to suffer from her disorder, though insignificant symptoms of it had been noticed some time before the date referred to above.

When carefully examined in hospital, her condition was as follows: Her intelligence was above the standard to be expected in one of her position. Her nutrition was fair, menstruation and functions of the alimentary canal properly performed. In the sitting posture, the cardiac pulsations averaged between fifty and sixty per minute, and were often counted at fifty. No organic disease of the heart could be recognized. The hands were constantly cold and bathed in a profuse sweat. This perspiration was poured out to such excess as to be a constant source of annoyance to her. All the nails of the hands were slightly discolored, somewhat rugous, their free borders slightly separated from that part of the nail-bed adjoining the tip of the finger. In the angle thus formed was a grayish, irregular mass of tissue, proliferated from the bed of the nail. This condition was very much less marked than the similar onychauxis to be noticed in the toes. There was no tylosis of the palms or symptoms of anæsthesia in those organs; the skin of the hands was soft and supple, though clammy and macerated with sweat.

The soles of the feet, including the plantar faces of the distal phalanges of the first and fifth toes, were symmetrically involved and displayed a uniform, grayish-yellow, thick, firm, and closely adherent callosity, whose surface was exceedingly rough and irregular. It was absent over but a small area of the sole, next the instep and plantar faces of the second, third, and fourth toes. On account of the habitual shedding and recurrence of this plantar shell, the feet had been at times exceedingly tender, and the inability of the patient to pursue her usual vocation on foot, resulting from this cause, had first induced her to seek hospital relief. While she was under observation, the truth of her statements relative to the periodical sloughing of these horny casts of the feet was abundantly substantiated. She was, while under treatment, subjected to repeated macerations of the soles of the feet for weeks at a time in water of various temperatures and medicated in various ways; in oil; with shampooings by the aid of green soap and alcohol; and treated also by external applications of caustic potash, mercury, tar, pyrogallol, and other substances, in the face of all which every six or eight weeks there was a reformation of the thick plantar callosity on each foot. When it was removed, either spontaneously or as a result of the soapings and scrapings practised by the patient herself, a sound tissue was never recognized beneath, but always an irregularly roughened, yellowish-gray and softish, macerated, horny layer of the epidermis. As a result, whether the cast were forming, formed, or recently shed, the soles of the feet were tender and locomotion correspondingly impeded. The feet were habitually cold and wet, and there was some anæsthesia as far as the ankle. Two pea-sized callosities on the dorsal surfaces of the fourth and fifth toes of one foot, participated in all these changes.

The nail of each toe was so deformed as to make the wearing of the usual coverings of the feet pain-

ful. Each nail was enlarged, irregularly thickened, unusually friable, deprived of its polish, and tilted up, often at an angle of thirty degrees from its bed. In the groove thus formed had accumulated an irregular mass of tissue, which resembled to a certain extent the uneven surface of the sole of the foot when the callous plate which covered it had been partially scraped off. The dorsum of the foot, though cold and macerated with constantly effused sweat, was apparently otherwise unaltered. Throughout the time during which this patient was under observation, no tendency whatever to ulceration beneath the plantar encrustation could be recognized: nor did the patient appear to be in the slightest degree permanently affected by either the internal or external medication which had been pursued, the former including the administration of arsenic, cod-liver oil, and the ferruginous tonics.

CASE III.—In July of 1886, M. D., male, pattern-maker, a Scandinavian, twenty-eight years of age, with an excellent family history, no tobacco habits, and no record of venereal disease, presented himself, complaining of loss of hair on the lower extremities. He was well-nourished and weighed 175 pounds. He had for two years noticed the alopecia for which he sought relief. His lower extremities were numb at times; this sensation annoying him often at night when wakeful in bed. In the daytime he had felt occasionally as though the lower limbs were yielding under the weight of the body. Questioned more closely he gave no history of prior disease; but remembered that fifteen years before, in his thirteenth year, he had been struck on the vertex of the head with a brick. This had not produced insensibility, but somewhat later a degree of cephalic pain in the vertex, for which a surgical operation was performed in the site of his former scalp wound, that gave him relief. He was uncertain as to the precise nature of the operation, but believed that a piece or pieces of bone had been removed from the skull. Lately he had again suffered from a peculiar pumping pain in the head, which prevented steady attention to his work.

When examined, a linear cicatrix, two inches in length and slightly attached to the bone was discovered to the left of the anterior terminus of the sagittal suture. The hands and feet were habitually cold. Broad areas of the skin, vertically disposed, extended from the middle of each leg downward, chiefly on the outer aspect of each, where no single filament of hair could be found. Anæsthesia was marked in both lower extremities; more so on the right side where also the alopecia was most distinct. Each nail of those on the hands exhibited a distinctly outlined, and unusually large and pale lunula. The nails of the index and fourth fingers of each hand were singularly flecked with shining, white, stellate, and irregularly outlined, translucent maculations. Careful investigation disclosed no removal of the free border of the nails from the nail-beds. Vision, tested by Snellen's types was normal; tendon reflexes unaltered.

Says Mr. Charles Atkin, in commenting on a disorder, which I take to be identical with that represented in the three cases described above: "As the pathology is as imperfectly understood as the treatment is unsatisfactory, I think every one who meets with a case is in duty bound to give a faithful account of its coincident symptoms and progress, so that in time a more definite idea of the disease may be formed." These pages are written with a view to making some response to that plea, and with a full conviction as to the unsatisfactory state of our knowledge on the general subject.

Of the several names for the group of disorders which in this connection we have reason to believe should be designated by a common title for identification, some are confusing, some indefinite, some imperfect, others positively misleading. The name *mal perforant du pied*, Latinized as "malum perforans pedis," the "perforating ulcer of the foot" of English and American authors, was first employed by Vésigné. It seems to be a permanent survivor of other names used in this connection, though defective in that we now well know the disease it designates may affect the hands as well as the feet, and may not be productive at any time of a perforating ulcer. The title of the present paper has been selected, not merely with a view to indicating the general character of the affection under discussion, but to permit of a brief glimpse over the wide field of which it is believed but a very small part is covered by cases of the kind represented in the clinical sketches just given.

Two chief reasons may be assigned for the uncertainty and confusion that seem to have attended the discussion of this subject. First, may be named the very wide multiformity of the symptoms presented in each case, as well as the differences exhibited by any two cases in the same general category. Second, as a result of the fact last stated, the circumstance that a number of English and French surgeons have named, described, and treated the prominent surgical complications of these singular hand and foot disorders, leaving to neurologists chief consideration of the nervous phenomena evident in another group; and to dermatologists the symptoms displayed for the most part in the skin.

Glancing over the entire field, it seems to me that we can establish tolerably distinct relations between four classes of symptoms displayed in these cases. They are not, strictly speaking, either stages or varieties of a single disease, though they may be indicative, in occasional instances, of periods of evolution of a single affection.

In the first class, relatively limited as to the number of symptoms displayed, we can recognize merely functional or transitory disturbances in the affected organs. Here, as in other classes, we find involved either the hands alone, or the feet alone, or both hands and feet. In this event a preponderance of symptoms may be noted either in the former or the latter. Among these symptoms may be named symmetrical hyperidrosis, limited to the organs affected, accompanied by a sense of both subjective and objective coldness. To this class belong the cases described by Mr. Hutchinson and other English authors, as "symmetrical asphyxia" of the extremities; and also those popularly named

in Great Britain "dying of the hands and feet," a phenomenon occasionally noted as following the immersion of these organs in cold water. Bromidrosis is another symptom noted by Atkin and others, both in hands and feet. The bond of union between these disturbances and those mentioned later is to be sought in the nervous and vascular systems. With the local phenomena are often associated a pulse ranging, with rapid variations in adults, from fifty to one hundred and twenty-five to the minute; local anæsthesia, claimed by Schwimmer as a constant symptom; suddenly occurring giddy and dizzy sensations; unusual spells, supposed to be of faintness; and vague pains, popularly believed to be rheumatic in character. No distinct line of demarcation separates the first from the second class of symptoms, many cases exhibiting the combined features of the two.

In a second and relatively large group may be collected the cases where, with or without, usually with, the functional disturbance named above, occur symmetrical structural changes in the skin and its appendages without ulceration or other destructive degeneration in the skin and subcutaneous tissue. This group includes many of the cases reported and described by dermatologists, and excludes many of those recorded by surgeons and neurologists. The first and most common of the symptoms here noted, in addition to the habitual blueness, coldness, and wetness of the hands or feet, or hands and feet, is a dystrophia unguim. This may involve all of the nails of the twenty digits, whether the two hands only or the two feet only are the seat of the hyperidrosis. Here the changes vary from slight roughness to extreme gryphosis. In some of Hutchinson's cases there was hyperidrosis with changes in every nail. Here should be included the same author's "true psoriasis of the nails contrasted with chronic onychitis;" his "chronic inflammatory disease of many finger-nails," and his "symmetrical slight disease of the nails in a young boy." In Elliott's case, lately discussed before the New York Dermatological Society, and reported under the title of "trophoneurotic affection of the nails," the nails of the ring-finger of each hand were first changed, and later all save that of the right index. In this connection the nail-change is described as a dystrophy, waiving for the present purpose any discussion of its pathological character; though I may add that the term onychauxis, employed in the description of my two cases, expresses my belief in the fact that there is at first certainly hypertrophy, and not atrophy, of the nail-substance.

As strictly cutaneous symptoms in this group of cases, may be named tender, painful, or insensitive maculations of the hands or feet, or both; pigmented patches, both palmar, plantar, and dorsal in situation; livid, dull crimson, or lurid blotches; persistent "erythemas," vesiculation, "ichthyoses," and "eczemas." The latter terms may, in this connection, be misused, since they may have been employed by a writer unfamiliar with dermatological distinctions, in order to point merely to the dry, slightly reddish condition of the palms seen in the first of my cases, resembling certain forms of eczema squamosum. Another symptom less frequently observed is a local alopecia or hypertrichosis, the hairs either entirely absent or multiplying or growing to an unusual and conspicuous length over the organs affected. The symmetrical tylosis, or callosity, which may involve the palms or soles, either or both, is well illustrated by two of the cases here reported. It may be partial or general, and persistently of one type or characterized by a spontaneous exfoliation and recurrence of a horny cast of a part or the whole of a palm or sole. With it, as appears from what has preceded, there may be symmetrical involvement of all the nails; it is reasonable to believe, from the gross appearance of such nails, that their beds are the seat of precisely the same pathological process as that resulting in the tylosis. An unusual multiplication and cornification of the cells constituting the nail-bed would, particularly if that change were limited strictly to the nail-bed and did not affect the matrix of the nail proper, tilt up and distort the nail-substance so as to explain in part the clinical deformity described above. The free border of the nail would thus be carried further from the nail-bed than the proximal border, which, being next the matrix, would be least involved, and therefore far less dislocated.

With these phenomena may be observed the common anæsthesia, the loss of tendon-reflexes, the wetness of the hands and feet; and pains simulating those occurring in rheumatism. Kirmisson reports seven cases with symptoms of glycosuria; and Heusner confirms this with his observations.

In a third division may be grouped the symptoms exhibiting ulcerative or other degenerative sequelæ. Here may be catalogued most of the surgical cases first described by Nélaton, to which Vésigné gave his name, "perforating disease of the foot," including the well-known phenomena first completely described by Messrs. Savory and Butlin. Even in this group we find the name defective from a descriptive point of view. Hancock, Nélaton, Térillon, Treves, Trélat, and others, report symmetrical ulcers of the hands as well as ulcers of the feet, which conditions are also represented in a number of faithful wood-cuts. Here we find the surgeons dilating upon the difference between suppurating ulcers beneath a corn (Callender, Erichsen), a tuberculous ulcer of the sole, and the lesion of malum perforans pedis. Here we find them also figuring and describing the shortening of the digits, and even of the entire foot (Jones), resulting from the same process. Some report spontaneous healing; some, a healing only after operative interference; some, a recovery if only the hands and feet are disused—one reports a case with resulting bony ankylosis.

In the same group may be placed the reported cases of symmetrical ulceration and dry gangrene of the extremities. Here may be named Atkinson's "case of multiple cutaneous ulceration," ending in recovery, where the lesions of hands, arms, feet, and legs began with pruritus, anæsthesia, papulation, and vesiculation, and terminated in ulceration and loss of phalanges. In this case there were also buccal and labial ulcerations. Here, also, should be in-

cluded Simon's cases of "multiple cachectic gangrene," beginning with vesiculation and ascribed by the author to the occurrence of thrombosis, even though congenital syphilis was present in the two children. The cases reported by Eichhoff and Cæsar Boeck, cited by Dr. Atkinson as closely related to his, seem to me to have no such connection. Weiss accurately describes these conditions in discussing Raynaud's disease, referring them to a central neurosis, "involving symmetrical (for the most part) portions of the hands and feet (phalanges), more rarely other regions of the body, in gangrene of a peculiar character." One French author does not hesitate to set in the same category the symmetrical gangrenous affections of the feet occurring in the senile condition.

In a fourth and last group, may be collected the fatal cases, those fatal by reason of a gravity of the general pathological condition, aside from any septicæmia or other cause originating in local disease of the extremities. Here may be cited Hutchinson's "form of inflammation of the lips and mouth, which sometimes ends fatally, and is usually attended by some disease of the skin." Here we find reported, as in other of the grave cases, the same changes in the nails and symmetrical involvement of the hands and feet. In this group also the cases observed by neurologists may be included, which embrace Charcot's disease (pied tabétique); and a series of grave disorders, such as progressive posterior spinal sclerosis betrayed in hand and foot ulcerations.

Surveying this rather formidable category of symptoms, we find the widest divergence among authors as to their etiology and mutual dependence. One discovers an absence of the axis-cylinder in a nerve; another, thickening of the neurilemma; another describes evidences of arterial disease; yet another, explains an increase of endoneurium, by the results of pressure upon the hands and feet.

Kaposi, in the latest edition of his work, explains some of these cases by paralysis of the vaso-constrictors; some, by the occurrence of thrombosis. Others find the motor nerves intact and the sensory nerves only diseased. Hereditary influences, tuberculosis, and spinal injury, have been held to explain some cases. Duplay and Moret account for another case by discovering a hydatid cyst compressing the scrotum. Some have observed the disease only in women; and Ogston and Baker are inclined to this view. Treves and Fox, of New York, are on record as pronouncing some of them "purely local" manifestations. No more striking illustration of the purely neurotic origin of some of these cases can be cited than the interesting symptoms observed by Tilden, after injury to the median nerve of one side.

If we can agree that these phenomena are, from first to last, in some way related, we have taken at least one step forward. On this point it seems to me that most can agree. Bromidrosis, vesiculation, papulation, ulceration, hypertrichosis, alopecia, hyperidrosis, tylosis, onychauxis, or (if the name be preferred) distrophia unguium—these are certainly multiform symptoms, but they are, several of them, displayed in the immense majority of all cases grouped in the four classes described above. The most conspicuous likeness between them all is that, with few and usually grave exceptions, they are limited to the hands and feet, and the regions nearest those organs, such as the wrists, ankles, forearms, and legs.

Now there are few strictly regional affections of the body characterized by marked multiformity of symptoms. In syphilis, for example, the multiformity is remarkable, but never limited to one organ or set of organs.

In view of these considerations, the suspicion arises that, whether always of strictly trophoneurotic or vaso-motor origin, the key to these resemblances and the link which connects them, is their distinctly regional limitation. They are all hand and foot diseases. These organs are farthest removed from the great centres of nervous and vascular force. They are also to a far greater extent than any portions of the body, subject to the important influences of the force of gravity and the effects of friction. Further, in any attempt at explaining some of this long series of symptoms, we cannot forget anatomical peculiarities of those organs possessing a striking significance. For example, Hoyer has shown that capillaries springing from the arteries, empty directly into lacuna-like veins in the nail-bed. This is a provision undoubtedly intended to furnish a safety-valve for occasions of temporarily increased vascular pressure, as for example, when the hand is constricted in toil; and its working even in severe paroxysmal asthma is visible to the naked eye.

In brief, admitting all that Atkin says, in the sentence quoted at the outset of this discussion, relative to the imperfect knowledge of the pathology of this disorder, or this group of many symptoms, I have striven to call attention to the fact that regional limitations may explain some of the obscurity which has hitherto invested the subject. We shall, for example, search in vain for the name of any disease whose pathology will explain the chain of symptoms that has resulted in a given scar on a man's leg. But the mind so readily replaces the links that satisfy our conception of the case, that we follow its connections no farther. First came a venous enlargement, whether from traumatism, from pressure effects, or from causes unknown to us, operating on one leg and not another. Then followed an *eczema e venis varicosis;* then an ulcer; then cicatrization; and lastly, deep pigmentation in the periphery. We may not demand for these diseases of the hand and of the foot the same links of the self-same chain. We may, however, look to see some of their phenomena explained by as simple a process of reasoning.

BIBLIOGRAPHY.

Atkinson: Amer. Journ. Med. Sciences, 1884, p. 57. *Atkin, Charles:* British Med. Journal, July 24, 1886. *Anderson, McCall:* Treatise on Diseases of Skin, London, 1857. *Baker, Morrant:* Clin. Soc. Trans., vol. xviii. *Bouchard;* Gaz. des Hôpit., 1884, No. 112. *Boeck, Cæsar:* Viertelj. f. Derm. u. Syph., 1881. *Ball and Thibièrge:* Lancet, Oct. 21, 1882; Report to Int. Med. Congress. *Bréhier:* Thèse de Paris, 1874. *Biggs:* Lancet, 1876, vol. vii. p. 735. *Billroth;* Wien. med. Wochen., 1878, No. 23. *Collander:* Clinical Society's Trans., April 12, 1878. *Duplay:* Arch. Gén. de Méd., 1876, p. 346. *Dèjerine:* Le Progrès Méd., 1882, No. 6.

Déjerine et Leloir: Arch. Gén. de Phys., 1881, p. 1011. *Eichhoff:* Deutsch. med. Woch., 1880, No. 34. *Elliott:* Journ. of Cutan. and Gen.-Ur. Dis., May and June, 1887. *Erichsen:* Surgery, 1879. *Estlander:* Arch. f. klin. Chir., 1870, xii. p. 453. *Flynn:* N. Y. Med. Record, March 28, 1885. *Foulquier:* Thèse de Paris, 1874. *Hamilton, A. McLane:* N. Y. Med. Journ., Oct. 1874. *Hastreiter:* Wiener med. Presse, 1882, No. 33. *Hutchinson, J.:* British Med. Journ., May 7 and June 18, 1887. *Heusner:* Deutsch. med. Woch., 1885, No. 16. *Jones, S.;* Path. Soc. Trans., 1876, No. 7. *Kirmisson:* Arch. Gén. de Méd., Jan. 1885. *Michaud:* Lyon Méd., Jan. 1876. *Mills:* Am. Journ. of the Med. Sci., Oct. 1878. *Mougéot:* Thèse de Paris, 1867. *Mitchell:* Amer. Journ. of the Med. Sci., July, 1878. *Nélaton:* Gaz. des Hôpit., Jan. 10, 1852. *Ogston:* Lancet, 1876, p. 13. *Pitres et Vaillard:* Arch. de Phys., Feb. 15, 1885, p. 209. *Petit et Verneuil,* Rév. de Chirurg., 1883, No. 19. *Raynaud:* Thèse de Paris, 28, 1863; Arch. Gén. de Paris, 1874. *Simon, Oscar:* Breslau Ärzlische Zeitschft, 1879, No. 1. *Schwimmer, Art.:* Malum Perforans Pedis; Ziemssen's Hand-book of Diseases of Skin. *Savory and Butlin:* Med. Chir. Trans., 1879, vol. lxii. (Illustrated). *Starr:* Journ. of Nerv. and Mental Dis., Feb. 1886. *Térillon:* Révue Médic., 1886, Report made to the Surgical Society of Paris. *Tilden:* Journ. of Cutan. and Ven. Dis., Oct. 1886. *Treves, Mr. Frederick:* Lancet, March 29, 1884, p. 950. *Warren:* Boston Med. and Surg. Journ., 1879, No. 13. *Weiss:* Wiener klinik, 1878. *Wilks:* Surgery of the Foot, p. 57.

NOTES ON THE USE OF MEDICATED RUBBER PLASTERS IN CERTAIN CUTANEOUS DISEASES.[1]

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DURING the past few years the subject of fixed dressings in the treatment of skin diseases has received considerable attention, and as a result, important therapeutic advances have been made. To-day the gelatin, collodion, gutta-percha solution, and similar dressings are widely employed and in some instances seem indispensable. Unna's plasters belong among this class of applications, and are excellently made and efficient, but unfortunately are in this country expensive and difficult to obtain.

About a year ago the idea of incorporating medicaments in the well-known rubber plaster suggested itself, and at my solicitation, the manufacturers, Seabury & Johnson,[2] kindly made a number of plasters —containing pyrogallic acid, salicylic acid, chrysarobin, ammoniated mercury, and oxide of zinc. They were remarkably adhesive, and when once applied would remain several days or even weeks. At the time the plasters were sent me, duplicates were forwarded, so I have been informed, to several other gentlemen interested in dermatological practice, of whom one or two have already reported on their use. While these plasters are an addition to our means of treating special cases, it must be admitted that as at present manufactured their use is somewhat limited. They are not adapted for acute and subacute cases. In this respect they are inferior to Unna's plasters referred to. The manufacturers show every disposition to perfect them, and doubtless in a short time these plasters will be found all that is desired. Their special field, according to my experience, is chiefly in the treatment of chronic, sluggish cases of eczema, in the larger patches of psoriasis, in ringworm of the scalp, in callosities, and in lupus and epithelioma. In these diseases, so far as my observations have gone, the sample plasters sent me have been of positive value.

In several cases of chronic papular and scaly eczema, in which the disease was limited to one or two palm-sized patches, a plaster containing twenty per cent. of ammoniated mercury was employed; the results were satisfactory. A single plaster would remain on for one or two weeks without loosening, a renewal being made about every ten days. The parts became gradually paler and the infiltration disappeared.

In psoriasis, in the large thickened chronic patches, chrysarobin plaster acts admirably. The scales are first removed by washing, the plaster cut to fit the patches and applied. As a rule, it remains adherent a week, and should then be removed, the parts washed and a fresh plaster applied. In the several cases of this disease in which it was employed, the objectionable properties of the remedy as ordinarily used, were not observed. In a few instances a single application of the plaster was sufficient to promote the disappearance of the diseased area, but in others a second and even third application became necessary. In those cases in which the disease is more or less general, and the spots small, the plaster treatment is not practicable; but in those instances where the disease persists in several large, inveterate patches it proves particularly useful. Chrysarobin plaster is serviceable, also, in ringworm. In three cases of ringworm of the scalp, in which the affection existed as two or three well-defined areas, the plaster was used with favorable results. The hair on and surrounding the diseased patch was removed by shaving, and the plaster applied. A renewal was made every week or ten days, the diseased stumps coming away with the old plaster. After six to eight weeks' treatment the disease seemed at an end, and the applications were discontinued; several months later, in two of the cases at least there had been no return, the third case failing to report.

A plaster of salicylic acid, ten to twenty per cent. was found of advantage in callosities. In one case in which both soles were involved to a marked degree, the condition was removed in a few weeks. The plaster remained adherent for a week without renewal. In certain cases of lupus the advantages of a fixed dressing are evident. In two suitable cases a pyrogallic acid plaster, twenty per cent., was applied, a renewal being made every third or fourth day. The result in these instances was equal to that obtained from the use of a pyrogallic acid ointment, without the additional trouble and uncleanliness of the salve applications.

The same may be said of the use of this plaster in the treatment of certain cases of epithelioma. In this disease, as well as in lupus, where the action of

[1] Read at the eleventh annual meeting of the American Dermatological Association, September 1, 1887.

[2] These plasters are equally well made by Johnson & Johnson; their samples sent me, I have since used with good results.

the remedy is necessarily destructive, the plaster must be renewed at frequent intervals.

Without additional comment, the advantages of these plasters may be briefly expressed in the words cleanliness, simplicity, and saving of time and trouble. As already intimated, while their field of usefulness is at present somewhat restricted, it may be expected that as the various plasters are finally perfected and made to meet the requirements, their therapeutic application will be considerably broadened.

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ANTIFEBRIN IN TYPHOID OR ENTERIC FEVER.

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THE alleged superiority of antifebrin over antipyrin in reducing excessive temperature without injury, led me to employ it during my present term of service in the German Hospital. The few attempts made to reduce high temperature in enteric fever, herewith recorded, present it as a much more dangerous agent than I have found antipyrin to be in a very extensive experience with that agent.

So powerful an agent has antifebrin proved in the few cases in which I have used it, that, as will be seen, three grains, or even one, will effect very decided results on temperature.

The inference is that small doses should be prescribed, say three grains, and that the patient should be visited at the end of an hour and examined as to the reduction of temperature before a second dose is administered; similar precaution being taken as to ordering a third dose; and that when the influence is seen to be marked, subsequent doses should not exceed one grain. The dose usually recommended has been eight grains. This has been far too large in my hands.

Temperature records are appended, illustrating the effect of antifebrin, and showing a remarkable and rapid return of high temperature after initial reduction, with subsequent reduction, and rebound next day without further administration of the drug.

Recent numbers of foreign journals, received since my own observations have been made, contain cautions as to the use of antifebrin, from experience similar to my own.

I append notes of examples of the effects of antifebrin, manufactured by Merck, on cases of enteric fever:

CASE I.—Boy, aged seventeen. Ninth day of disease, temp. 103.6°. Seven grains *antifebrin given at* 5 P.M., *and repeated in one hour.* Effect: *1st day* of antifebrin, 6 P.M., temp. 103.2°; 8 P.M., 98°; 9 P.M., 96.4°; 12 midnight, 97°. *2d day*, 4 A.M., 102.6°; 6 A.M., 103°; 8 A.M., 103°; 9 P.M., 99°; 10 P.M., 97.4°. *3d day*, 2 A.M., 102.2°; 7 A.M., 102.8°; 7 P.M., 104.8°, *five grains antifebrin given;* 8 P.M., 101.2°; 10 P.M., 99°; 12 midnight, 101.6°. *4th day*, 4 A.M., 104.2°; 8 A.M., 102.8°; 7 P.M., 103.8°, *three grains antifebrin given;* 10 P.M., 98°; 12 midnight, 98.4°. *5th day*, 4 A.M., 104.8°; 7 A.M., 101.2°. Orders to discontinue antifebrin and resume routine treatment of the ward.

CASE II.—Married woman, aged twenty-two. Fourth day of disease. Evening temp., 100.4°; fifth day, *first day of antifebrin*, 7 P.M., temp. 103°, *three grains antifebrin given;* 8 P.M., 98°; 10 P.M., 96°. *2d day*, 2 A.M., 98°; 4 A.M., 95°; 6 A.M., 98°; 8 A.M., 102°; 7 P.M., 99°. *3d day*, 8 A.M., 96.6°; 8 P.M., 103.8°, *one grain antifebrin given;* 9 P.M., 99°; 12 midnight, 98°. *4th day*, 4 A.M., 99°; 7 A.M., 103°; 5 P.M., 103°. *5th day*, 6 A.M., 98°; 5 P.M., 100°.

CASE III.—Boy, aged nineteen. Temp. 5 P.M., 103°, *five grains antifebrin given;* 8 P.M., 101.4°; 9 P.M., 100°; 10 P.M., 97.6°. *2d day*, 2 A.M., 99.2°; 7 A.M., 99.8°; 7 P.M., 102.8°. *3d day*, 7 A.M., 100°; 5 P.M., 102.6°.

CASE IV.—This was a case of so-called recurrent typhoid, reëntering the hospital; 7 P.M., 104.8°; *three grains antifebrin given;* 10 P.M., 100.2°; 12 midnight, 103.2°. *2d day*, 4 A.M., 102°; 7 A.M., 103.8°; 5 P.M., 103.6°.

CASE V.—Temp. 8 P.M., 104.2°, *one grain of antifebrin given;* 10 P.M., 104°; 12 midnight, 104°; *two grains antifebrin given;* 2 A.M., 102.8°; 8 A.M., 102.8°; 5 P.M., 102°.

HOSPITAL NOTES.

PHILADELPHIA HOSPITAL.

Service of BARTON C. HIRST, M.D.

HIGH GRADE OF RACHITIC PELVIS; LABOR INDUCED; PRESENTATION OF TRUNK; COMBINED VERSION BY THE HEAD; SUCCESSFUL DELIVERY BY THE POULLET-V. HECKER FORCEPS.

(Reported by RICHARD C. NORRIS, M.D., Resident Physician.)

M. H., aged twenty-two years, colored, II-para, was admitted to the hospital with a history of having ended her last menstrual period on December 1, 1886. The customary examination with pelvimeter was made, and the following diameters were noted: Iliac spines, 20½ cm.; iliac crests, 23½ cm.; external conjugate, Baudelocque, 18 cm.; internal conjugate, diagonal, 10 cm.; true conjugate, estimated, 8 cm. Vaginal examination; pelvis smooth; promontory well marked and sharply defined. Husband of patient brawny and large-boned. Abdominal palpation showed the child to be well developed in size, occupying a transverse position, the breech somewhat lower and to the left. Fœtal heart sounds could not be heard, the left side being low down.

Induction of labor was proposed, and consented to. On July 28th a solid, flexible, hard-rubber bougie, No. 12, was inserted between the posterior uterine wall and the membranes, and pushed obliquely upward, toward the left about six inches, and allowed to remain. Twenty-four hours later the os had softened somewhat, and a second bougie, No. 17, was similarly introduced, and both allowed to remain twelve hours longer. At this time the os was slightly dilated, and quite soft. The pains had not been at all marked. Barnes's dilators (three sizes) were then introduced at short intervals, and the cervix well dilated. The membranes were then

ruptured, and an attempt was made at the same time to convert into a breech by external manipulation. This failed. The patient was etherized, and combined version by the head to left occipito-anterior position was followed by the application of the Poullet v. Hecker forceps. The head was soon brought below the brim of the pelvis, and the delivery was then completed with Simpson's forceps.

Throughout the management of the case there was a striking absence of uterine contractions. The child is quite vigorous, weighs five pounds and six ounces, is seventeen inches in length, and has the following measurements of the head: Bitemp., 7 cm.; biparietal, 8½ cm.; occip. frontal, 10½ cm.; occip. mental, 12 cm.; trachelo-bregm., 8 cm.; circumference occip. frontal, 31 cm.; circumference trachelo-bregm., 29¼ cm.

The mother recovered with no bad symptoms, and at this time (seventh day) has had no elevation of temperature, pain, tenderness, or discharge, and promises a speedy convalescence.

MEDICAL PROGRESS.

The Influence of Antifebrin, Salicylic Acid, and Carbolic Acid on Bodily Temperature.—Dr. Hare, in a series of researches reported in the *Therapeutic Gazette* for June, July, and August, 1887, reaches the following conclusions:

1. *Antifebrin* effects *marked* depression of normal bodily temperature.

2. During the depressing action of antifebrin on normal temperature it seems to cause a slight fall in arterial pressure, although this is by no means a constant result, as it may cause a rise.

In the opinion of the writer, however, this drug in lowering temperature acts as an arterial sedative.

3. Notwithstanding the fact that antifebrin influences to such a marked degree normal bodily heat, it seems to possess little power against the pyrexia produced by the introduction of pepsin into the blood, since under these circumstances the hitherto depressed pressure rises, as does also the bodily heat.

This curious fact must depend on some organic changes produced by the digestive ferment.

4. This drug reduces *normal* temperature apparently by influencing both production and dissipation.

5. Antifebrin in fever chiefly reduces the high temperature by decreasing heat production, and is, therefore, a valuable antipyretic.

1. *Salicylic acid* has the power to reduce slightly normal bodily heat.

2. *Salicylic acid*, according to the writer's experiments, has but little power over pyretic temperature.

3. *Salicylic acid*, when acting on either normal or abnormal temperature, does not seem to have much influence on the circulation either in regard to pulse-rate or arterial pressure. Any change, when it occurs, seems to be an increase of arterial pressure rather than a decrease, and this increase occurred more markedly in the normal than in the pyretic animal.

4. *Salicylic acid*, in reducing normal temperature, probably acts on both functions, namely, production and dissipation, while it seems to act very uncertainly and irregularly when reducing high temperature, failing frequently, as before stated, to prevent an increase of bodily heat.

1. *Carbolic acid* possesses considerable power in lowering normal bodily temperature.

2. It possesses more influence over pyretic temperature than does salicylic acid, generally preventing a rise or causing a fall of temperature, but sometimes failing to do so.

3. *Carbolic acid* probably decreases arterial pressure when lowering temperature.

4. That its mode of decreasing normal bodily temperature is as yet not fully understood, although it would seem probable that it acts on both heat functions.

5. When influencing bodily heat in fever it acts chiefly by decreasing production, although it affects both functions.

The Treatment of Abortion for Three Years in the Obstetrical Clinic of Florence.—Fasala has observed the following rules in the treatment of abortion, with good results:

1. An expectant course is pursued when the cervix uteri is closed, and can be dilated with difficulty, and if no signs of the decomposition of the fœtus are present.

2. Under conditions favorable for the introduction of instruments or the hand, the ovum and its appendages are promptly removed.

3. If decomposition has begun, the cervix is dilated by laminaria tents or metallic dilators, and the ovum is removed.

4. Intra-uterine injections for antisepsis are made with warm solutions of bichloride of mercury, 1 to 2000; in case of hemorrhage, hot solution of bichloride of mercury, 1 to 4000, and tamponing the vagina, are used.—*Annali di Obstetricia*, March, 1887.

Antipyrin in Scarlatina and Bronchitis among Children.—Friedländer, of Russia, reports fourteen cases of scarlatina, all of whom recovered under the use of antipyrin in doses of nine grains once to three times in twenty-four hours. Profuse perspiration, fall of temperature, and in nearly all cases refreshing sleep of two hours, followed the use of the drug. The dosage was according to age, the maximum dose is that stated. In acute bronchitis nine grains of antipyrin sufficed to influence children under two years of age favorably for twenty hours; while thirteen grains, with children under five years of age, were sufficient to lower temperature for twelve or fifteen hours; this dose was generally given twice in twenty-four hours. Profuse perspiration, lessened cough, sleep, and general improvement followed. During convalescence, half the doses given during the height of the disease were used. In addition, the following was found useful:

℞—Caffein	gr. $\frac{9}{10}$ to gr. 3.
Sodii bicarb. . . .	gr. 23 to gr. 45.
Aquæ fœniculi . .	ʒ 15.
Syr. ipecac . . .	ʒ 7½—M.

Sig.—One-half to one teaspoonful every half hour or every two hours.—*Therapeutische Monatshefte*, August, 1887.

The Action of Tobacco.—Recent observations by Russian experimenters have resulted in the following

conclusions: The assimilation of nitrogenous matter is lessened by tobacco. Digestion is prolonged. The assimilation and elimination of potassium iodide was accelerated by smoking. The influence of tobacco is most marked at the commencement of its use. The examination of 1000 workers in tobacco, compared with a series of control experiments on animals, resulted in finding among the workmen dilatation of the pupils; cardiac neuroses; exaggerated tendon and vasomotor reflexes; trembling hands; dyspnœa. Headache, gastralgia, cramps, and nervous cough, were also present. The respiratory organs were most frequently attacked after the nervous system.

Phthisis was not especially frequent.

The same symptoms were produced by injecting $\frac{1}{40}$th to $\frac{1}{10}$th of a drop of nicotine in rabbits, $\frac{1}{20}$th to $\frac{1}{3}$ of a drop in dogs, and keeping them also in a tobacco-impregnated atmosphere.—*Bulletin Général de Thérapeutique*, July 15, 1887.

SPLENOTOMY FOR LEUCOCYTHÆMIA.—DR. STRONG reports in the *Western Medical Reporter* of September 15, 1887, the removal of a leucocythemic spleen weighing nine pounds nine ounces. The spleen was freely movable, no adhesions to the abdominal wall or intestines existing; the tail of the pancreas was so firmly united to the hilus of the spleen that no attempt was made to separate it, it was ligated with the pedicle of the splenic tumor. The greater curvature of the stomach was adherent to the spleen and was separated, and from this surface blood oozed persistently.

The patient died four hours after the operation from hemorrhage from the adherent surfaces which had been separated. Microscopic examination of the blood before operation showed a leucocythemia of 50 per cent.

PHOSPHATE OF COPPER IN THE TREATMENT OF PHTHISIS PULMONALIS.—The following formulæ have been employed by LUTON, of Reims, and are reported by him in the *Revue Générale de Clinique et de Thérapeutique* of September 8, 1887:

℞.—Cupri acetat. neut. . . . gr. $\frac{1}{6}$.
Sodii phosphat. cryst. . . . gr. 5.
Liquiritiæ pulv.
Glycerin. . . . . āā q. s.—M.

For each pill.
Also,

℞.—Cupri acetat. neutral . . . gr. $\frac{5}{6}$.
Sodii phosphat. crystal. . . gr. $8\frac{1}{2}$.
Mucilag. acaciæ.
Aquæ . . . . . āā ℥2.—M.

Sig.—Dose, a teaspoonful as indicated.
For hypodermatic use.

℞.—Cupri phosphat. (newly precipitated) . . . . 1 part.
Glycerin.
Aquæ dest. . . . . āā $2\frac{1}{2}$ parts.

To be mixed at the moment of administration.

PHYSIOLOGICAL PROPERTIES OF ACETO-PHENETIDINE.—HINGSBERG and KEST are quoted by the *Centralblatt für die medicinischen Wissenschaften*, No. 9, 1887, in reporting their experiments with this substance as follows: It is a derivative of anido-phenol, crystalline, very soluble in ether and acetic acid, less soluble in water. Doses of 15 to 30 grains produced no physiological effects upon dogs. From 45 to 75 grains produced respiratory paralysis, vomiting, stupor, and cyanosis, which disappeared after a few hours. When used as an antipyretic a dose of 8 grains lowered temperature several degrees in three or four hours, producing moderate transpiration without collapse or cyanosis. Arterial tension was increased. The urine of animals which took this substance was colored yellow; when hydrochloric acid was added the urinary salts were precipitated. Salts of copper were reduced, and polarization to the left occurred. The substance is an analogue of antifebirn, which it resembles.

A SUCCESSFUL NEPHRORRHAPHY.—DR. LLOYD reports in the *Practitioner* for September, 1887, his method of operating in a recent successful case as follows:

I purposely stripped off a portion of the capsule over an area one inch in diameter, and then secured the kidney to the lumbar tissues by carrying two stout catgut sutures, by means of a medium-sized curved needle, through the skin, fascia, and muscles, then entering the proper capsule and kidney substance close to one edge of the exposed area, passing completely across and beneath this area to emerge at a point corresponding to that of its entry on the opposite side, and then returning to the surface through muscles, fascia, and skin. A stout drainage tube was inserted down to the kidney. The lips of the wound were closed with deep silver sutures, and finally the transfixing gut ligatures were securely tied, thus bolting up the raw kidney surface to the deeper end of the wound through the soft parts. After several months the result is perfectly satisfactory: the organ which formerly "jumped" from the loin on to the front of the lowest lumbar vertebra, each time the patient tilted toward the opposite side, is now firmly at anchor and free from the slightest movement. This methodical excision of kidney capsule is, I believe, novel, and appears to have certain advantages over other procedures. Adhesions forming from the more lowly organized fibrous tissue of the kidney capsule are less abundant than those which will develop when the more highly organized kidney substance is concerned. Again, there usually remains a certain thickness of delicate connective tissue mesh about the capsule after we look upon it as being quite bared, and it is to this loose tissue that the connecting fibres will often form attachments. This delicate intervening layer may subsequently stretch indefinitely, just as it has done before to allow of that mobility to remedy which the operation is performed. When, on the other hand, the kidney substance is uncovered, there can be no doubt that the resulting scar will be incorporated with the organ we wish to secure, and not merely with a layer of yielding tissue around it. The kind of cicatrix we desire in nephrorrhaphy is like that which results from certain diseases attended by loss of bone substance.

HOT WATER ENEMATA.—TRIPIER, of Lyons, has obtained excellent results with enemata of very hot water in rectal and vesical tenesmus in those afflicted with locomotor ataxia, and also lead colic. His results

were especially striking with dyspeptic patients. For children from eight drachms to one ounce was used; for adults, a quart; the temperature of the water was from 113° to 118° F.—*Journal de Médecine*, July 31, 1887.

Mydriatics and Their Uses.—Dr. Jackson, of Philadelphia, is quoted as follows by the *Ophthalmic Review* for August, 1887, on this subject:

Simply to dilate the normal pupil, a single drop of either of the following solutions suffices:

Cocaine hydrochlorate, gr. j, water, ♏ xxv,
or about 1 to 25;
Homatropine hydrobromate, gr. j, water, f℥j,
or about 1 to 500;
Atropine sulphate, gr. j, water, f℥v,
or about 1 to 2500;
Duboisine sulphate, gr. j, water, f℥x,
or about 1 to 5000;

or daturine, hyoscyamine, or hyoscine salts used of the same strength as duboisine.

Of the above the homatropine solution renders the pupil rather the most rigid, and its effects pass off in from twenty to fifty hours, but *cocaine is the most generally valuable dilator of the pupil.* The dilatation it produces lasts but ten or twenty hours, is never so great in strong as in feeble light, so that there is less annoyance from exposure to the light; it produces proportionately the smallest impairment of accommodation; and the dilatation it produces can be promptly overcome by the use of eserine, making it especially valuable after middle life, when there is a chance of the occurrence of glaucoma. And this drug has yet another advantage. In spite of the readiness with which it yields to myotics, in spite of its inability to prevent entirely the reaction to bright light, tested in a weak or moderate light, *cocaine produces a wider dilatation of the pupil than any other mydriatic.* And this superior power of cocaine is especially manifest in old people, whose pupils often do not dilate well under other mydriatics.

To paralyze the accommodation completely, from two to five instillations of a drop of either of the following solutions usually suffice:

Homatropine hydrobromate, gr. x, water, f℥j,
or about 1 to 50;
Atropine sulphate, gr. iv, water, f℥j,
or about 1 to 120;
Duboisine sulphate, gr. ij, water, f℥j,
or about 1 to 240;

or daturine, hyoscyamine, or hyoscine in the same strength as duboisine. Homatropine should be instilled at intervals of from five to fifteen minutes; with the other mydriatics, to avoid constitutional effects, the intervals must be much longer. Cocaine in any strength cannot, in most cases, completely control the accommodation.

Of the above, for diagnostic purposes, homatropine is to be preferred. It reduces to a minimum the period of disability for eye work, recovery from it being nearly complete in from thirty-six to forty-eight hours against five or six days for duboisine or ten or twelve days for atropine. It causes no noticeable or distressing symptoms, like the dryness of the throat, flushing of the surface, incoördination of motion, or even delirium, which are liable to follow the use of the other mydriatics, although it does usually to some extent influence the action of the heart.

Nasal Croup.—Hartmann, of Berlin, reports six cases of this affection which occurred epidemically in children between three and nine years old. The disease pursued a mild course, becoming a simple nasal catarrh in from eight to fourteen days. Treatment was removal of the membrane by cotton, and the free use of iodoform in powder.—*Deutsche medicinische Wochenschrift*, July 21, 1887.

Abdominal Gestation; Operation; Recovery.—Takaki, a Japanese Surgeon, reports in the *Sei-I-Kwai Journal* for July, 1887, the case of a multipara, aged twenty-eight, who gave a history of irregular discharges from the uterus, abdominal pain, and the presence of a tumor. On examination, a tumor was found on each side of the abdomen below the umbilicus. They were elastic, painless, and not connected with the uterus. Aspiration of the left tumor gave blood; of the right fluid resembling ovarian fluid. On opening the abdomen, encysted abdominal pregnancy was found. The fœtus and appendages, the sac and its adhesions were removed, the abdomen disinfected, and closed by deep and superficial stitches. Recovery followed in fifteen days. The partially disorganized fœtus weighed about one and a quarter pounds.

Treatment of Pediculi.—Vartanian, of Constantinople, has had excellent results in the destruction of these parasites by frictions with flannel dipped in the following:

Acid salicylic	2 to 3 parts.
Vinegar	25 "
Alcohol (80°)	75 "

—*Revue de Clinique et de Thérapeutique*, July 28, 1887.

Disinfection of Typhoid Stools with Boiling Water.—Wiltschur, in the *Vratch*, No. 26, 1887, has tested the action of boiling water upon cultures of typhoid bacilli and found that twice the volume of boiling water will destroy bacilli, and three times their volume will destroy spores of the bacilli. In experimenting upon typhoid stools he found that from two and a half to three volumes of boiling water destroyed bacilli in stools, and four volumes were sufficient to destroy their spores.

The Effect of Antifebrin upon the Blood.—Henocque reported at a recent meeting of the Society of Biology of Paris, his observations on the blood of animals intoxicated with antifebrin. The change of oxyhæmoglobin to methæmoglobin is the phenomenon observed. In the human subject, while therapeutic quantities of from 15 grains to 50 grains daily are used this change is only observed when cyanosis supervenes. The quantity of oxyhæmoglobin must have been reduced to 6.5 per cent. before the line characteristic of methæmoglobin is seen in the spectroscope. Clinically this condition may be diagnosed by observing the capillaries of the thumb. When in those vessels the percentage becomes eight it is indicated that the activity

of nutritive processes is much lessened, and the drug should not be used continuously.—*Revue Générale de Clinique et de Thérapeutique*, August 4, 1887.

CALOMEL, HYPODERMATICALLY.—SMIRNOFF, of Vienna, proposes a mixture of one part calomel and ten parts glycerine, which he puts in dark glass bottles, tightly stoppered with glass, each containing thirty grains of calomel and five drachms of glycerine. When required for use, the bottle is to be thoroughly shaken, and the hypodermatic syringe introduced through the wide mouth.—*Therapeutische Monatshefte*, August, 1887.

TREATMENT OF SCARLET FEVER.—The *Lancet* of September 3d, states that the present epidemic in London is, for the most part, of a mild nature, but considerable attention has to be given to the throat, which seems to suffer in a marked degree, the glandular swelling being correspondingly marked. Hence it will be found that gargles of all kinds, and especially those of an antiseptic nature, are freely used, together with compresses of various degrees of heat and moisture applied to the neck. Most practitioners, even those of the most expectant schools, employ topical applications to the throat and nose. Many articles are used to relieve the thirst and sensation of dryness, but nothing is more effective than ice and a little raspberry vinegar. It is important to keep the nostrils and nasal passages sweet and clean. For cerebral symptoms, nothing is better than the application of cold, either in the mild form of lint soaked in iced water and applied to the shaven head, or in the more effective capilline tubes, with irrigation. Compression of the carotid arteries and bleeding are seldom practised nowadays, either in scarlet or any other fever. Aconite in minute doses, frequently repeated, is still the favorite drug of many practitioners, but its employment needs the exercise of clinical discretion, especially in children. Actual bathing in cool or tepid water is practised by but few physicians, though the number of practitioners who recommend the use of cold or tepid sponging, the patient lying in bed on a mackintosh, appears to be largely on the increase. Most of the alleged specific and curative agents have long since lapsed into discredit. Belladonna finds but few adherents, and carbonate of ammonia almost none. Considerable difference of opinion exists on the merits of inunction with fat, cold cream, and the like, two of the most recent authors on the diseases of children taking opposite views, DR. GOODHART advocating and DR. ANGEL MONEY opposing universal inunction, though the latter sees no objection to relieving the tension of the palms and soles by the application of geoline or vaseline scented with eucalyptol.

TERPINOL IN PILLS AND CAPSULES.—The following formulæ are advised by RABOW in the *Therapeutische Monatshefte* for August, 1887:

℞—Terpinol.
Ammon. benzoat.,
Ceræ flav.,
Mass. pil. . . . . āā ʒ 2½.
Mucilag. tragacanth. . . q. s.
Fiant pil. 100 in num.

Terpinol may be given in capsules as follows:

℞—Terpinol.
Sodii ben. . . . . āā gr. 15.
Sacch. alb. . . . . q. s.
For ten capsules.

Sig.—One pill or capsule every one or two hours.

HYPODERMATIC INJECTIONS OF SOLUTIONS OF MARINE SALT FOR ANÆMIA.—HEGAR has obtained good results from the injection of a solution of 6 to 1000 of marine salt, pure and recrystallized, in anæmia. Sphygmographic tracings showed an improved condition of the circulation.—*Revue de Thérapeutique*, August, 1887.

THE BEST SUTURE MATERIAL.—VEIT, of Berlin, in an article in the *Therapeutische Monatshefte* for August, 1887, decides in favor of catgut, concluding that the healing of the wound does not depend upon the suture material used, but upon its antiseptic condition, and this is more easily secured with catgut than with silk; every physician can easily possess antiseptic catgut, and its absorption when allowed to remain in the tissues, is also greatly in its favor.

ODONTALGIA OR NEURALGIA?—The great difficulty occasionally experienced in diagnosticating whether neuralgic pain of the fifth nerve is due to peripheral irritation from disease of the teeth or to some affection of the nerve trunk, made PROF. VICTOR HORSLEY'S paper on this subject at the Odontological Society of considerable interest, especially to dental surgeons. The principal points of distinction may be summed up under the following heads: 1. Trophic changes, such as muscular wasting in the parts to which the pain is referred, chronic congestion, or alternating dilatation and constriction of the bloodvessels, point to mischief in the trunk of the nerve. 2. Alterations in sensation, anæsthesia or hyperæsthesia of the skin, especially when gently touching the skin causes extreme pain, while firm pressure causes no pain at all, are, he believes, never due to dental irritation. 3. The origin and character of the pain are sometimes useful as a means of diagnosticating the two conditions. When the pain begins in the skin or bone, and subsequently is referred to the teeth, the probability is that the lesion is in the nerve trunk; if it is stated to begin in the teeth, it may or may not be due to them. Professor Horsley expressed the view that *constant* pain is in most cases of peripheral origin, whereas intermittent pain is due to trouble nearer the nerve centre; but this is opposed to the experience of most dental surgeons, intermittent pain being a frequent accompaniment of dental disease. Lastly, the existence of "tender spots" along the course of the nerve or its branches, is generally an indication of irritation along the whole course of the nerve, but occasionally occurs in cases of peripheral irritation.—*Lancet*, September 3, 1887.

FIBRINOUS PNEUMONIA.—CASPAR, of Greifenberg, derives the following conclusions from the study of twenty cases occurring in his practice, and a review of the literature of the subject:

Fibrinous pneumonia is an infectious disease; contagious; having an incubation period of generally four days. Low temperatures, moisture, and strong winds, favor its inception and spread.—*Berliner klinische Wochenschrift*, July 25, 1887.

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A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, OCTOBER 8, 1887.

THE VALUE OF THE SULPHATE OF SPARTEINE.

WITHIN the last year or two this drug has been tested both by the bedside and in the laboratory by so many observers that we have at the present time a large mass of literature concerning it. But little investigation as to its influence on the system has been undertaken either in this country or England, by far the greater number of results having been obtained by French or German observers.

Unfortunately these reports have produced such varying and opposite results that the clinician hesitates to use the drug, since, while one writer lauds it to the skies, another may report absolutely negative or untoward effects from its use. MASIUS, of Brussels, has, perhaps, more carefully than any other observer, tested its action from a physiological standpoint, and reaches the following conclusion, that in small doses it does not influence the circulation, in moderate doses it depresses the vagus and accelerates the pulse-rate with a corresponding decrease of the quantity of blood expelled from the heart at each contraction. In poisonous doses it palsies the pneumogastric and produces asphyxia, and in the healthy subject has no influence on the renal excretion. He also believes that the influence of the drug on the heart and kidneys is uncertain and not to be depended upon.

On the other hand, GLUZINSKI in *Fezegad de karski*, No. 1, 1887, and *Vratch*, No. 3, 1887, has obtained results, which in some points are absolutely contradictory to those of Masius. Thus, he found that sparteine slows the heart and increases blood pressure in the first stage after its administration, that in the following stage the pulse may become rapid, while in the third stage the pulse again becomes slow and the pressure high. He explains the secondary condition by imagining some pathological change in the irritability of the vagus or heart muscle, which change only lasts until the advent of the third stage. The third stage is accompanied by failure of respiration, and it is therefore evident that Gluzinski is right in confining the drug's usefulness, as a therapeutic agent, to the first period. He believes it to be less powerful than digitalis, but more rapid in its action.

The researches of VOIGT and LEO are equally contradictory. The former found that sparteine in the dose of $\frac{1}{65}$ to $\frac{2}{65}$ of a grain stimulated the heart, increased its contractions, and raised the blood-pressure. He does not think it, however, a diuretic of the first rank. He would recommend its use in valvular disease with failing compensation, or in those cases where compensation being complete the heart needs a tonic and sedative, and also in the palpitation of "weak heart" without valvular disease. Lastly, he recommends its use in pericarditis and as an adjuvant to digitalis. Leo, who, in comparison with Voigt, gave enormous doses of the drug (as much as one and a half grains) reached favorable results in only nine out of twenty-four cases, and in these nine, objective improvement was scarcely noticeable. In eight others subjective improvement occurred, while in seven no result whatever was obtained.

In Leo's hands the drug did not increase the blood-pressure materially, but did, in some cases, increase diuresis. Here, again, Leo's results clash with those of GERMAIN SÉE, who places sparteine and digitalis side by side, as increasing arterial tension. Notwithstanding the large doses used, he observed no toxic effects.

In the *Berliner klin. Wochenschrift* of September 5, 1887, DR. PRIOR contributes quite an exhaustive article on this drug, in which he states that sparteine regulates the pulse-rate, induces diuresis, and is free from cumulative action. He believes with Leo that it is neither a first-rate diuretic nor cardiac stimulant.

Last of all, we have the paper of DR. CLARKE in the current number of *The American Journal of the Medical Sciences*, in which he reaches the conclusion "that sparteine belongs to the digitalis group." According to this observer, we have in sparteine a remedy for cardiac hypertrophy, of an excessive type, combined with one possessing powerful properties as a cardiac stimulant where the heart is overtaxed, and also a remedy which resembles digitalis, yet increases the rapidity of the pulse. As is well known, cardiac hypertrophy contraindicates digitalis, and digitalis always slows the heart, except in cases of advanced poisoning, and it is, therefore, difficult to determine where the similarity of action exists.

Unfortunately, but little of the confused matter

before the profession can be unravelled, except by further careful research. The varying results of Voigt and Leo, and the doses used by each, certainly show that one of them did not use true sparteine, or else that his specimen of it was most impure. Some of the other discrepancies may be partly set straight by variations in the manner of administration, and like influences, but nevertheless an actual knowledge of the drug scarcely warrants its use unless as an experiment.

INTERMITTENT ALBUMINURIA.

DUBREUILH has contributed to the *Revue de Médecine* for August, a critical study of the subject, from which we learn that sex has an important influence on the etiology, as shown by the occurrence of the condition in forty-nine males out of the fifty-five cases. The majority of the cases were under twenty years of age; sixteen occurred between the ages of sixteen and twenty; only thirteen between the ages of twenty and thirty, and three cases above this age. Three instances are given of the affection in brothers.

The quantity of urine passed is usually normal, the specific gravity rather above the average, ranging from 1.020 to 1.030; the color not very deep, and the reaction acid. There is very commonly an excess of uric acid and oxalates. In typical cases the albumen is not abundant, not exceeding 15 grains to the quart. Heat and nitric acid have been the tests usually employed. In three cases globulin was found, and peptone has also been noted.

The most remarkable feature of this form of albuminuria is the periodicity, whence have been derived the names intermittent and cyclic. In a large proportion of the cases, the urine secreted at night, which is passed on rising, is free from albumen. Before noon, as a rule, the albumen appears, attains its maximum in the afternoon, and diminishes toward evening. In many cases food is quite without influence, in others it seems to play an important rôle. Exercise, cold, and emotions, particularly mental strain, appear as exciting causes in some of the records. The general condition of those affected may be excellent, and in many instances the discovery has been accidentally made, on the examination for life insurance or for one of the services. In other cases there are headache, lassitude, general feebleness, dyspepsia, and palpitation of the heart. The diagnosis is not difficult in typical cases, the periodicity, the frequent increase by exercise, or food, the absence of tube casts, and of cardio-vascular changes, are sufficient to exclude the various forms of nephritis. The chief difficulty arises in cases of interstitial nephritis, in which, as is well known, the albumen may vary very much, and the nocturnal urine may be almost, or completely, free. The age, and the occurrence of tube casts, and the circulatory changes will be the important guides.

We scarcely know enough about these cases to speak decidedly upon the question of prognosis. For years the health may remain good, but indicating, as the albumen certainly does, either a defective metabolism, or a feebleness of the renal tissue, such patients should exercise special care in food and drink. In some cases the condition has lasted for only a few months, in others for a period of years. No perfectly satisfactory mode of treatment has yet been found, but such tonics as iron and arsenic have proved beneficial in improving the general health, though the albumen may not have been influenced in the slightest degree.

CIRRHOSIS OF THE LIVER IN CHILDREN.

IN the current number of the *American Journal of the Medical Sciences* DR. PALMER HOWARD, of Montreal, presents an elaborate study of this rare condition, based upon two cases occurring in his practice and sixty-one instances recorded in the literature. From this somewhat extensive material we may gather information which throws light on the general etiology of cirrhosis.

Considering the causative relations of the cases analyzed, we find that in 10 the children were addicted to the use of spirits; in 7 there was a clear history of syphilis; in 7, perhaps 8, cases tuberculous disease coexisted; but in more than one-half of the cases the etiology was obscure. It is possible, as Botkin originally suggested, that the infectious diseases may originate chronic inflammatory changes in the organs, in proof of which may be cited Klein's discovery of an acute interstitial hepatitis in 8 cases of scarlet fever; but in only 9, of the 38 cases which cannot be referred to any of the established causes, had acute infectious disease preceded, by a longer or shorter interval, the cirrhosis.

For the remaining cases Howard is inclined to favor Budd's suggestion, that the products of faulty digestion and certain stimulating kinds of food conveyed to the liver may excite interstitial hepatitis. Among such products the ptomaines may be important, and it is possible that they may be as irritating, or even more so than alcohol. Unquestionably in cirrhosis we must take into account the special constitution—the personal equation, so to speak—of the liver tissue. How resistant it may be to the injurious effects of alcohol, after years of exposure in some instances, how vulnerable in others! In certain children, a rich, stimulating diet may act injuriously, as alcohol, on an organ constitutionally prone to interstitial change. That such a tissue weakness may exist is suggested by the occasional

occurrence, as in Howard's cases, of the disease in members of the same family.

Of the character of the cirrhosis in the 50 non-syphilitic cases, in 19 the organ was atrophic, in 13 hypertrophied, in 6 of normal size, and in 16 this point was not mentioned. The symptoms are practically identical with those of cirrhosis in adults. Fever is by no means uncommon, but this occurs in ordinary cirrhosis more frequently than is generally supposed, or taught.

DIVERSE APPLICATIONS OF ANTIPYRIN IN THERAPEUTICS.

In The Medical News of May 28, 1887, we called attention to the results obtained by Germain Sée in the treatment of certain painful neuroses by antipyrin, his original observations being recorded in *L' Union Médicale* of April 26, 1887. Since that time Professor Sée has not been content with so limited a use of the drug, and in the same journal of September 10 and 13, 1887, we find records of the application of the remedy to a very large number of diseased conditions associated with pain. Among these we may mention both acute and chronic articular rheumatism and the acute paroxymal pains of gout, lumbago, sciatica, and the neuritis of ataxics.

In the second division of his paper, Sée records his use of this drug in painful conditions associated with disorders of the viscera, chiefly abdominal. Chief among these are renal and hepatic colic, colic of a gastro-intestinal type, and that associated with the uterus. Passing on, he speaks of its efficacy in the pain of angina pectoris, and of anæmic heart. Finally, he compares it with antifebrin, and gives no small amount of praise to the drug of which he writes. In the *Centralblatt für klinische Medicin*, No. 35, is a paper by Dr. Seifert, of Würzburg, on the same subject, in which he speaks of the value of antipyrin in hemicrania, angina pectoris, and chorea. This writer also speaks very favorably of the drug as used in these conditions. In view of the results so uniformly attained, by observers on the other side of the water, it is a little surprising that reports of its use by American practitioners should be so few and meagre.

Dr. Samuel G. Dixon has been elected Professor of Hygiene in the University of Pennsylvania, to succeed the late Prof. N. Archer Randolph.

Dr. St. John Roosa's *Treatise on the Ear* has been translated into German by Dr. Ludwig Weiss, and will be published early in the coming year by August Hirschwald, of Berlin.

Fourteen of the immigrants who arrived on the steamship "Alesia" a fortnight ago, have died of cholera at the hospital on Swinburne's Island, and there are still ten cases under treatment. The health authorities have had the vessel thoroughly fumigated, and she has been allowed to pass quarantine. Three of the cabin passengers were allowed to come up to New York last Monday.

SOCIETY PROCEEDINGS.

AMERICAN DERMATOLOGICAL ASSOCIATION.

Eleventh Annual Meeting, held in Baltimore, August 31, and September 1 and 2, 1887.

Wednesday, August 31st.—Morning Session.

The Association was called to order by the President, Dr. H. G. Piffard, of New York.

Dr. R. W. Taylor, of New York, read a paper on

THE TOXIC EFFECTS OF IODOFORM.

He reported the details of 24 cases, 9 of which came under his personal observation. 16 of these cases were accompanied by constitutional disturbances while in 9 the rash existed alone without any apparent systemic symptoms. A large number of cases have been reported in which toxic constitutional effects have followed the use of iodoform. It is evident that the toxic effects of iodoform are more frequently manifested by systemic irritation than in cutaneous manifestations.

The skin affections may be classed under the general head of dermatitis, but for the sake of accuracy may be further subdivided according to their relative frequency, into erythema, eczema, and purpuric spots. The erythema due to iodoform may present many of the features of similar eruptions. Its mode of invasion is prompt and extension rapid. It may commence at the point where the application has been made, or other patches of erythema may begin in other parts and extend to meet that from the original point. Erythema may follow from simply smelling the iodoform. The eruption completes its evolution in a few days and under favorable circumstances this eruption rapidly undergoes involution, behaving very much as an ordinary exanthematous eruption. Various forms of erythema have been noted. Sometimes it is very superficial; in other cases it is still superficial but of a deep red hue, and may be termed scarlatiniform. In exceptional cases, usually those presenting grave constitutional symptoms, the erythema presents points of resemblance in hue and brawny feeling to erysipelas. Other cases may be placed under the head of erythema multiforme.

The eczema resulting from the use of iodoform is usually of severe form and rapid evolution, and may begin at the point of application or in parts at a distance. It may also result from simply smelling the drug. Its character is pronounced from the first. A large surface is involved and in all respects it is similar to ordinary eczema malidans. The involution is, as a rule, almost as rapid as the evolution, if the drug is removed. In some instances, however, the eruption shows a tendency to become chronic. It is usually amenable to treatment. Eczema occurred in 9 of the 25 cases reported.

The time of the appearance of the eruption was noted as follows; in 12 cases it began within a few hours or within the first day; 2 on the second day; 3 on the third day; 1 on the ninth day; 1 on the twelfth day; and 2 on the fourteenth day. This is in contrast with the statistics of the onset of the symptoms when systemic poisoning results. In the majority of these cases the morbid symptoms begin in the second week. As a rule, it may be stated that in proportion as the rash is slow in appearing, so are the concomitant symptoms severe. Statistics seem to show that the cutaneous manifestations are most frequent in youth and middle age, while the systemic symptoms occur most frequently in the aged. The erythema appearing upon the hands of dressers in hospitals as a result of the direct contact of the iodoform was regarded as being related to the ordinary hyperæmia induced by mustard and other irritating applications and not to be considered as belonging to the class of cases just described.

DR. J. NEVINS HYDE, of Chicago, had seen the eczematous form of eruption, and also erythema multiforme, and in one case there was a bullous type of eruption resulting from the use of iodoform. This occurred in a young man who had an operation performed for necrosis of the tibia. Iodoform was used in the dressing of the wound. The recovery was complicated with recurrences of erythema upon the surface of the body. This occurred in the form of large areas of a vivid bright color, afterward becoming dull. Scattered over these surfaces were large bullæ containing a clear, transparent fluid, and when ruptured produced superficial excoriated surfaces. The condition was finally traced to the iodoform application and within ten or twelve days after the discontinuance of the iodoform the eruption disappeared and did not recur.

DR. J. C. WHITE, of Boston, had seen a number of cases of eruptions due to the free use of iodoform in the treatment of surgical injuries. He had never seen systemic manifestations where there was dermatitis. The form of eruption has varied from simple hyperæmia up to the vesicular form and going no further in most cases. In occasional instances there appeared a furuncular form of inflammation owing possibly to mechanical obstruction of the cutaneous follicles by particles of the powder. The eruption is almost always found in the immediate vicinity of the point of application.

DR. I. E. ATKINSON, of Baltimore, then presented

A CLINICAL STUDY OF ERYSIPELAS IN CHILDREN.

He considered erysipelas to be a contagious, infectious disease. During the first month it is extremely fatal, but the mortality gradually diminishes up to the end of the first year. The fatality at this period is probably to be attributed to its dependence upon the poison of puerperal fever. He reported the detailed histories of three cases of erysipelas in young children. In two a cellular, board-like induration occurred as the result of intense œdema and cellular infiltration. In neither of these cases was there suppuration. He thought that erysipelas should be considered the expression of the effect of one of a number of specific causes, and in that sense should be regarded as a symptomatic inflammation.

DR. J. C. WHITE asked if the author personally knew of a case in which erysipelas was directly transferred from one person to another; and if he regarded the tincture of the chloride of iron as having any specific therapeutic action in the treatment of the disease.

DR. ATKINSON replied that he had not seen an instance of the direct contagiousness of erysipelas, but there are a number of well-authenticated cases on record. He could not say that the tincture of the chloride of iron was a specific, but in his experience it has had a more favorable influence on the course of the disease than any other remedy that he has employed.

DR. J. C. WHITE had never seen a case of facial erysipelas transferred from one individual to another. If at all contagious, it must be so with extreme rarity. He regards tincture of the chloride of iron, and all other internal remedies, as useless in the treatment of this form of erysipelas. For five years he has given no internal medicine in the treatment of erysipelas, and has not seen a case in which the erysipelatous eruption did not disappear in from five to ten days. In his experience, infantile erysipelas has been so wholly different in its clinical aspects and course, with or without treatment, from ordinary traumatic erysipelas, that it seems to be quite a distinct disease.

DR. HYDE had seen one case which seemed to indicate the contagious nature of erysipelas. A young mother, soon after confinement, had her ears pierced for ear-rings. This was shortly followed by typical erysipelas, spreading over the face and scalp. Soon the nursing child was affected with the disease, and presented typical erysipelas, from which it died. He agreed with Dr. White, that tincture of the chloride of iron is useless in the treatment of this affection.

DR. ATKINSON said that in those cases of erysipelas which may be termed septic, whether the disease depends upon ordinary septic poison or not, he had no doubt that benefit is derived from the administration of the tincture of the chloride of iron in large doses, as much as half a drachm, three or four times a day.

DR. R. B. MORISON, of Baltimore, then read a paper on

LEUCOPATHIA UNGUICUM, A PECULIAR AFFECTION OF THE NAILS.

The ordinary white spots found upon the nails are well known. These are gradually forced to the outer edge of the nail by the growth of new nail behind. The time occupied in this process varies from four to six months. These spots are usually irregular in shape. A lady, twenty years of age, recently came under the author's observation, in whom these spots presented a uniform appearance. Examination of the nails showed white bands one-sixteenth of an inch in width, extending across the nail, from border to border. The nails were perfectly smooth, and in other respects normal. The general health was good, and there had been no acute disease. These white bands across the nail had been regularly appearing for many months. During the previous summer the lines had disappeared almost entirely, the toenails were not affected and the hair was not gray. Portions of the nails were subjected to microscopical examination. Sections were made, cutting the white lines at right angles. By direct light these lines appeared of a pure white, while the rest of the section was of dark color. The application of acetic acid and

other agents caused a gradual disappearance of the lines. Canada balsam also caused their rapid disappearance. It, therefore, seemed plain that these white lines were due to air spaces in the nail; the disappearance being caused in the one case by the swelling of the adjacent cells, induced by the acetic acid, and in the other, by the filling of the spaces with Canada balsam. Examination of several white spots gave similar results.

DR. HYDE then reported

THREE CASES OF SIMULTANEOUS HAND AND FOOT DISEASE.

(See page 416.)

DR. L. A. DUHRING, of Philadelphia, has regarded the affection as dependent upon a want of nutrition in the nail tissues, and had employed arsenic with satisfactory results. This acts upon the nervous system, improving the nutrition of the whole member, and of the finger-nail in particular.

DR. P. G. UNNA, of Hamburg, said that the presence of air in the horny tissues is always a secondary phenomenon. The horny masses must be changed before they will allow the entrance of air. These white spots in the nails are analogous to medullary substances.

He had seen cases similar to those described by Dr. Hyde, and had allied them with eczema. His principal reason for so doing was that in some cases he had seen combined with the disease of the hands patches of eczema on various portions of the body.

DR. R. W. TAYLOR, of New York, regarded Dr. Hyde's cases as cases of tylosis of the hands and feet.

DR. LE GRAND N. DENSLOW, of St. Paul, regarded the cases as instances of callosities. In his last case, in the person of a hotel porter who was unable to perform his duties on account of the tender condition of the soles of the feet, he first removed the callosities by the application of a saturated solution of salicylic acid in collodion, and then made a false sole for the feet by the application of belladonna plaster spread upon kid. By this means he is able to attend to his work in comfort.

DR. E. WIGGLESWORTH, of Boston, had now under treatment a case similar to those described by Dr. Hyde. He regarded it as a case of tylosis. In the treatment he employed a 20 per cent. solution of salicylic acid in emplastrum saponis until the callosities were removed. He then dressed the parts with equal parts of belladonna and mercurial plaster spread on kid. Regarding the condition as dependent upon lowered nutrition, he also employed tonics with good effect.

DR. HYDE, of Chicago, stated that he had at first regarded these cases as instances of tylosis, but a large experience showed that this view was not correct. In one case he had watched the course of the disease for three years. The parts have been macerated for days and weeks at a time. He knew that there is a constant new formation of these masses, and that the nails are continually undergoing a similar process. These cases are entirely different from the ordinary forms of tylosis and callosities.

AFTERNOON SESSION.

DR. L. D. BULKLEY, of New York, presented some

CLINICAL NOTES ON PRURITUS.

Pruritus may be defined as a functional disturbance of the nerve elements of the skin, resulting in itching not dependent upon local irritation or local lesion. Out of a total of 5000 cases of general skin diseases he had records of 80 cases of pruritus, a proportion of about 1.75 per cent. Thirty of the patients were females and fifty males. In the majority of cases there was some chronic disease, such as gout, albuminuria, and chronic bronchitis, or marked evidence of lowered general vitality. Temporary benefit was obtained in some cases while in others no relief resulted from treatment. The author was of the opinion that in many cases the condition resulted from reflex irritation. In 115 observations which he had made in all but three the reflex occurred on the same side as the point of irritation.

DR. F. B. GREENOUGH, of Boston, presented some

CLINICAL NOTES ON PEDICULOSIS.

He had been induced to examine this subject on account of the fact that the statistics of the Association had shown that there was a greater proportion of cases of pediculosis reported from Boston than from any other city. The only explanation of this fact that can be offered is that the difference is more in observers than in the number of cases of the affection. An observer in one city may put under the head of eczema capitis, a case which would be considered in Boston as one of pediculosis capitis.

DR. J. C. WHITE, of Boston, said that in the treatment of pediculosis of the pubic region and of the head he always used crude petroleum. This does not produce the slightest irritation upon the most inflamed surface. It is allowed to remain in contact with the hair for two or three hours.

D. J. C. WHITE then read

AN INTRODUCTION TO THE STUDY OF THE INFLUENCE OF DIET IN THE PRODUCTION AND TREATMENT OF SKIN DISEASES.

Many articles of diet are considered, both by the people and by the profession, as injurious in certain affections of the skin. He held that in regard to many of these articles there was no evidence of their injurious effects, with the exception of popular belief, and that they should not be discarded until more proof was advanced against them. Among various substances considered injurious in skin diseases, butter was mentioned, but he regarded pure, uncooked butter as entirely harmless so far as the skin is concerned. Oatmeal and buckwheat have been classed in the same category, but there was no foundation for such a belief. The same remarks apply to fish and meat, which have been regarded as harmful by some dermatologists. He then mentioned certain articles which in his experience had seemed to be prejudicial in certain skin affections. Alcohol aggravates the course of inflammatory conditions of the skin. In some lager beer will produce a crop of acne over the lower part of the face. The eating of acid fruits may cause an acute eczema. Strawberries often cause urticaria. Apples are said to produce an acneform efflorescence about the mouth. Some nuts, especially the English walnut, may produce inflammation of the mucous lining of the mouth. Shellfish and crustaceans may occasionally give rise to urticaria. Other meats may at times produce similar effects. The worst case of giant urticaria that he had seen had followed the use of roast turkey.

DR. HYDE agreed with the speaker in regard to most of the articles mentioned. He should, however, put oatmeal on the black list. Where urticaria follows the use of the grape, he thinks that it is principally due to the fact that the seeds and skin of the grape are also swallowed.

DR. P. G. UNNA, of Hamburg, had seen urticaria produced by strawberries in cases where the berry had not been swallowed but simply placed in the mouth.

DR. BULKLEY had more than one patient who cannot take raspberries without having urticaria. In some cases pineapples have a similar effect. He had seen many patients in whom injurious effects have followed the use of milk with the meals. If taken between meals it produces no injury. He had found that nearly almost every case of acne is aggravated by soup taken with the food

THURSDAY, SEPTEMBER IST.—MORNING SESSION.

At the business meeting the following were elected

OFFICERS FOR THE ENSUING YEAR:

President.—Dr. I. E. Atkinson, of Baltimore.
Vice-President.—Dr. P. A. Morrow, of New York.
Secretary and Treasurer.—Dr. G. H. Tilden, of Boston.

The report of the Committee on the

CONGRESS OF AMERICAN PHYSICIANS AND SURGEONS

was received and adopted. Dr. I. E. Atkinson, of Baltimore, was appointed representative to the Executive Committee of the Congress, and Dr. G. H. Tilden alternate.

DR. L. A. DUHRING, of Philadelphia, read a paper on

THE DIAGNOSIS OF DERMATITIS HERPETIFORMIS.

He had been led to believe, from the perusal of various reports of cases, that this affection was not thoroughly understood. Its chief characteristic is the multiformity of the lesions manifested in the natural evolution of the disease. Blebs, vesicles, and pustules, may appear together or separately. Mixed eruptions are the most common, vesicles predominating. In one attack or another only one kind of lesions may be present. The disease presents clearly defined characters in distinct elementary lesions, and certain distinctive abortive lesions. Secondary forms of lesions also exist. Pigmentation of a dirty yellow or brownish hue, and variegated, is usually a marked feature in chronic cases. In no other affection are such varied combinations of lesions met with as in dermatitis herpetiformis. Erythema and vesicles, or vesicles and blebs, or blebs and pustules, frequently exist side by side in close proximity with more or less pigmentation, excoriation, and secondary changes. Itching is usually a most distressing symptom, and is most severe in the vesicular variety. In the purulent form, subjective symptoms may be wanting. The disease is extremely chronic, extending over a number of years. In two cases, under the author's observation, the duration had been thirteen and eleven years respectively, and the disease was still active with no prospect of cure.

Some cases of dermatitis herpetiformis closely resemble cases of erythema multiforme, but the lesions of the former disease are less sharply defined, and the course of the two affections is different, erythema multiforme being an acute disease of short duration. The disease occasionally resembles herpes iris, but the chronicity of the affection would exclude herpes iris. The lesions are also more virulent and accompanied with a more profound degree of cutaneous disturbance. Herpes iris is a benign affection, running an acute course, and terminating in recovery, although subject to relapses. When the bullous varieties exist alone they may resemble pemphigus vulgaris, the combination with other lesions will, however, prevent any confusion in the diagnosis.

DR. P. G. UNNA, of Hamburg, read a paper on

THE TREATMENT OF LEPROSY.

After referring to the fact that leprosy was usually considered incurable, and that as a consequence treatment was not resorted to, he stated that he had recently treated five cases of this affection with encouraging results. The treatment consists in the external use of the following ointment:

Chrysarobin	5 parts.
Ichthyol	5 "
Salicylic acid	2 "
Vaseline	100 "

This is applied to the nodules on all parts of the body with the exception of those on the face, neck, and hands. In the latter situations pyrogallic acid is substituted for the chrysarobin in the above formula. Such an application may be continued for months. For some of the older nodules this is not sufficiently strong; for these the author employs salicylic acid or salicylic acid and chrysarobin in the form of a plaster on muslin. This is allowed to remain two or three days or a week. Under this application the tubercle drops out.

In the five cases treated by this method there has been a rapid disappearance of the leprous matter in the skin. There also was in these cases a decided improvement in the general condition, although no internal remedies were given, the object being to test the efficacy of the external applications.

DR. P. A. MORROW, of New York, had recently had the opportunity of treating a number of cases of leprosy, and he believed that certain cases of leprosy are as responsive to chaulmoogra oil as are cases of syphilis to mercury. In the case of a Norwegian, the subject of tubercular leprosy, the lesions had disappeared, and he had apparently recovered under the use of chaulmoogra oil. On a number of the nodules of the face he used caustic potash, and they disappeared very rapidly. Some cases, however, fail entirely to respond to this treatment.

DR. PIFFARD some time ago treated a case of leprosy in a young man from Bermuda. When he entered the hospital he was unable even to dress himself. He was given a preparation containing strychnia, and in six weeks was engaged in rowing the boat across the river. He also used nux vomica in as full doses as the patient would tolerate. He was in the habit of associating this with the external use of chaulmoogra oil.

AFTERNOON SESSION.

DR. H. W. STELWAGON, of Philadelphia, read a paper on

THE USE OF MEDICATED RUBBER PLASTERS IN CERTAIN CUTANEOUS DISEASES.

(See page 421.)

Dr. Unna said that in the plasters which he employed the plastic mass was spread upon muslin much more flexible than that on which the rubber plaster is spread. The adhesive material which he employed had been either the oleate of aluminium, or the best India-rubber. As little of the adhesive material as possible was employed, not more than two to five grammes to the square metre. The strength of the plaster is reckoned, not by percentages, but as so many grammes of the active agent to the metre.

Dr. H. G. Piffard, then read a paper on

SALT IN DERMAL HYGIENE AND THERAPEUTICS.

In vigorous individuals psoriasis and chronic eczema will often be benefited by a short sea-bath, followed by rubbing. If the patient be feeble, or the bath prolonged, the result will be unfavorable. Prickly heat, pruritic affections, and furuncles, are often benefited by sea-bathing.

In acute eczema the use of ordinary water is, as a rule, followed by temporary aggravation of the trouble. In these cases a full bath of 5 per cent. to 1 per cent. salt solution had been used with great comfort to the patient. In subacute eczema, psoriasis, furuncles, in irritable summer rashes, whether papular or pustular, and in ulcerating syphilides, a 5 per cent. solution of salt may be used with great advantage. The salt-water bath should be used as hot as can be borne, continued fifteen to twenty minutes, and should be taken just before retiring. Genuine sea salt is not so good for the bath as coarse white salt, on account of the slimy feeling which is left. The therapeutic effects are identical.

Adjourned.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Special Meeting, September 19, 1887.

The President, J. Solis-Cohen, M.D., in the Chair.

Mr. Lennox Browne, F.R.C.S., of London, read a paper on

AN UNRECOGNIZED CAUSE OF SOME THROAT AILMENTS.

In accepting the very flattering invitation of your President to speak a few words to the members of the Philadelphia County Medical Society, it appeared to me both more becoming and more profitable to offer you some practical remarks explaining the *rationale* of some of the commoner of throat ailments, than to attempt to magnify the office of the laryngoscope by the relation of rare and wonderful cases. I was the more inclined to this view because I was well aware that, through the assiduous industry and well-known skill of your President and other members of your Society, you have for some years been kept thoroughly posted in all that is new in laryngology.

It is now some ten years since first I sought an objective explanation of the condition known as *globus hystericus*, and since I commenced to make a systematic examination with the laryngoscope of every patient who came to me with this symptom. The result was communicated in a paper to the Congress of Laryngologists held at Milan in 1880. I found that but very few cases indeed are of a hysterical character—that is, of the nature of a phantom sensation—though uterine or ovarian disorder is a not infrequent predisponent, or, at least, concomitant of the throat condition in the female sex.

Extending the term *globus hystericus*, I find that, with hardly an exception, all and every other subjective sensation in the throat is symptomatic of an objective cause. The chief of such feelings are those of a heat, a prickling, a swelling, a weight, a straw, a hair, or other foreign body. A few patients—one especially, a hale farmer—have complained of a feeling of intense cold, which is sometimes relieved, sometimes aggravated, after food-taking. In some instances there is actual pain with spasm, cramp, and a sensation of choking, and not infrequently there is cough; this symptom varies in degree from a slight hacking, to the loud hyena-like bark known as nervous laryngeal cough. Many of the cases of so-called laryngeal vertigo, or, as I prefer to call it, of laryngeal epileptiform seizures, are capable of explanation and cure, on the lines I am at present taking.

On examination of the throat of a patient with symptoms such as I have described, one may or may not see chronic congestion and relaxation of the fauces and uvula, enlargement of the tonsils or obstruction by caseated material of the orifices of the crypts, granular pharyngitis, or even laryngeal hyperæmia. Where any one of these conditions is present, treatment thereof may or may not give relief; but none of them represents the class to which I would draw your attention, namely, that in which there is no generally recognized morbid state of local significance.

The results of laryngoscopic investigations in my hands have shown that there is:

1. A varicose, and even truly hemorrhoidal, condition of the veins at the base of the dorsum of the tongue, sometimes at the under surface and sides, in which last case it may be symptomatic of mitral insufficiency, or of severe hepatic derangement, or even of cerebral lesion. There is often a similar varicose state of the vessels in the superior surface of the epiglottis.

2. An enlargement of the circumvallate papillæ at the back of the tongue, causing the epiglottis to be hindered in its movements—imprisoned, as your President first called it.

Just drawing attention to the fact that the structure of these glands is very similar to that of the tonsils, I may mention that in a few instances I have seen actual blocking of the orifices, similar to the condition known generally as chronic follicular tonsillitis.

I may also note that it is not possible to see these things either with a tongue depressor or in the laryngeal mirror as ordinarily employed. Many observers, especially beginners, seem to consider that their sole aim is to see the vocal cords, and, if these are sound, they write down, "larynx normal;" but they omit to look well to the frame-work. To see this condition of lingual varix and glandular hypertrophy, the mirror must be placed high up in the throat.

Where, as is often the case, there is no actual or noticeable enlargement of the thyroid gland, it will be observed, in passing the hand gently over the front of the throat, that there is a distinct fulness of the thyroid isthmus. If the least pressure be made at this situation, the patient—not necessarily a female—will complain that the abnormal sensation is at once excited, and, on

being questioned, will admit that when it occurs the collar is felt to be too tight for the neck.

Inquiring into the general health, and happily failing to find any of the more serious lesions to which I have alluded, it will be noted that habitual constipation and a generally defective circulation are both frequent symptoms; while in others there will be concomitant evidences of a varicose diathesis, as rectal hemorrhoids, varicocele, or varicose veins of the extremities.

In females the menstrual flow is often morbidly frequent or excessive, and there are other evidences of an enfeebled vasomotor control. Abuse of alcohol and tobacco are excitants of the condition; and in the cases or public speakers, defective methods of filling the lungs —forcing the lower registers upward, or other functional fault which may lead to undue strain on the palato-pharyngeal muscles and engorgement of the vessels in this region—are fruitful predisponents.

In this connection, I may refer to the accurate explanation offered by your fellow-citizen, Dr. Carl Seiler, of the etiology and pathology of chronic pharyngitis when occurring to voice users.

Some of those obscure cases which come under our occasional notice, of the presence of small quantities of blood in the mouth, or of the taste thereof on rising from sleep, will be explained by the leakage of one or other of these enlarged and hemorrhoidal venous capillaries in the region now under consideration.

A few words as to treatment. If the case is not of long standing or of aggravated character, correction of the main constitutional cause—cessation of the faulty method of voice production, or prohibition of a vicious habit or indulgence—may be sufficient to effect a cure, but this is rarely the case. Of remedies, I give chalybeates and aperients with digitalis or ergot, as may be indicated. Locally, astringent applications, especially of chloride of zinc or perchloride of iron, are by no means without avail; they can be applied by the patient himself. Gargles as ordinarily employed are useless, and occasionally are productive of exacerbation of the symptoms. Not so if employed by the method known as that of Von Troeltsch. Of lozenges, I find those of muriate of ammonia much more active in leading to resolution of the venous congestion, than those of red gum, rhatany, etc.

Recent investigations show that the astringent properties of tannin have been exaggerated. Where the uvula is relaxed, the snipping of an elongated portion, especially if other functional or constitutional faults are corrected, may lead to a cure; but in a certain proportion of patients in which the promises of the specialists as to the good effects to be gained by the procedure are not realized, the cause of failure will be found in non-recognition of the varicose vessels. Treatment of these is best effected by the galvanocautery point, and it is necessary to seal each individual enlarged vessel. For this purpose it may be necessary to make more than one application. Lastly, there is often a hyperæmic tumefaction of the vessels, glandules, and submucous tissues of the pharynx, naso-pharynx, and turbinated bodies; these will also be best treated by galvanocautery.

In conclusion, I would say that if it be objected that the conditions I have described are but representative of an advanced chronic congestion, I do not deny that such occasionally may be the case. In the majority, however, there are no such antecedents; and where the two exist, the practitioner will fail to cure his pharyngitis, or what not, until he has recognized and treated the varix.

And it is in this light that I have ventured to call attention to the subject as one that is not generally recognized, for beyond a short communication made at Milan at the same time as my own, by my deceased colleague, Llewelyn Thomas, I have seen no allusion to it in any text-books or archives, and no notice is taken of it by the great teachers of Vienna. I therefore make no apology for having occupied your time with considerations that may, on first hearing, appear trivial, or of exaggerated importance.

DR. CARL SEILER quite agreed with the speaker, that the *globus hystericus* is rarely of purely imaginary origin. Some chronic inflammation of the upper air passages usually accompanies this distressing condition. As he truly says, pharyngitis is one of the most common causes of this symptom. At the same time the pharyngitis is to his mind, as a rule, the consequence of remote causes which may be looked for in one of three different directions—in a disturbance of the gastric system, in a disturbance of the respiratory function of the nose and naso-pharynx, and finally, and most commonly in public speakers and singers, in a faulty use of the organ of voice. The latter condition is frequently met with in those who simply use the voice for ordinary conversation. The constant irritation thus produced leads to hyperæmia and chronic inflammation, which extends upward, rather than downward, into the trachea. In the treatment of the condition described, he thinks that little can be accomplished by the application of remedies to the apparent seat of the disease, but that the cause must be looked for and removed.

CORRESPONDENCE.

A GOOD BANDAGE.

To the Editor of THE MEDICAL NEWS,

SIR: In your issue of September 24th, under the head of "Flannel *versus* Rubber Bandages," you speak of the various forms of material used for bandaging purposes. My object is to call your attention, and that of the profession, to an article made of cotton, and woven in tubular form in the manner of hose, which combines the permeability of flannel, without the great disadvantage of shrinkage upon washing, also the roughness preventing slipping, greater elasticity than flannel—yet less than rubber—and not least, at much less cost than either.

This material, made at the suggestion of Dr. Stelzner, of Dresden, by H. Müller of that city, in widths varying from 2 to 22 inches, is largely used by him, by Nussbaum and others, in all dressing requiring elastic support and pressure. Not its least advantage is its ready and easy application in the hands of the class usually with varicose ulcers, etc.

There exists, in my opinion, no better material, and a variety of uses suggest themselves. Moderately filled with plaster, it makes a most excellent splint. For encircling the thorax, where the extreme rigidity of mus-

lin is objectionable, it appears to me to be the very best afflicted material.

The inclosed specimen will, I trust, speak more eloquently of its good qualities than any note.

Yours, respectfully,

O. Czarnowski.

New Orleans, September 28, 1887.

[The sample inclosed we find has all the merits claimed for it, and in practice should prove excellent. —Ed.]

NEWS ITEMS.

A Congress at Amsterdam.—There will be a Congress for Natural Science and Medicine, at Amsterdam, on September 30th, and October 18th. Professor Donders will be President of the Section on Medicine.

Sanitary Police in Italy.—A corps of sanitary police has just been created by the Italian government, and Dr. Pagliani, Professor of Hygiene in the Turin University, has been placed at its head.—*Sanitary News*, September 10, 1887.

The Cremation of Infectious Bodies.—It is now an imperial regulation in Brazil, that persons who die from yellow fever shall be cremated, the State bearing the whole expense. This decree might be extended judiciously to all contagious diseases. —*Sanitary News*, September 10, 1887.

Theatre Physicians.—The ordinance recently put in force in Paris for the regulation of theatres, provides that each theatre must have a corps of physicians proportionate to the size of the theatre, one of whom must be constantly in attendance during the performances. In the physician's office must be placed an ambulance call.

The Avoidance of Overpressure in Schools.—The Committee of the French Academy of Medicine reported as follows on this question: "The Academy of Medicine calls the attention of the public authorities to the necessity of modifying, in conformity with the laws of hygiene and the necessities of the physical development of children and young people, the present arrangements of our scholastic establishments. It thinks that the colleges and lycées for boarders should be removed to the country; that wide, open spaces should be set apart for games; and that the class-rooms should be improved as regards lighting and ventilation. Without dealing with the course of study—which it desires to see simplified—the Academy calls special attention to the following points: Increase of the time for sleep, as regards young children; for all the pupils a diminution of the time devoted to study and classes—that is to say, to sedentary occupations—and a proportional increase of the time for amusement and exercise; the absolute necessity of submitting all the pupils to daily exercise in physical training, proportioned to their age—namely, walking, running, jumping, formations, evolutions, regulated and prescribed movements, gymnastics with apparatus, fencing of every kind, games of strength, etc." —*British Medical Journal*, August 13, 1887.

Professional Secrets.—A Belgian physician has been several times condemned by the courts for refusing to give the name of the mother of a child whom he delivered. The Minister of Justice, in reviewing the case, holds that no legal power exists which can oblige the physician to betray a patient's confidence.

Antisepsis in Duels.—In a recent duel between French journalists, the seconds had taken the precaution to dip the swords of the combatants in carbolized solution; as the result, their wounds healed without suppuration, and they were about in a few days after their encounter. *Le Progrès Médical* suggests that in duels with pistols, bullets which had been sterilized by immersion in proper liquids, or treated at proper temperatures, be employed. We suggest that germs previously agreed upon by the combatants be selected in place of bullets and swords, and that duels by inoculation be instituted as a refinement characteristic of Nineteenth Century medicine.

A Medical Journal in Manitoba.—The *Manitoba Lancet* will represent medical journalism in this advance post of the profession.

Amputation of the Cervix Uteri during Hypnotic Sleep.—In July last, Dr. Pio Masetti, at the hospital of San-Giacomo, at Rome, amputated the cervix uteri while the patient was hypnotized. The experiment was completely successful. No evidence of pain was given by the patient.

Swill Milk.—*Science*, of September 30, 1887, closes its inquiries regarding the use of swill milk as follows: There appears to be some difference of opinion as to the exact chemical composition of distillery swill, under different circumstances; so that in carrying out any experiments the following points, as suggested by Professor Law, should be ascertained and recorded: (1) Is the swill fresh? (2) Has it undergone any other than the alcoholic fermentation? (3) Is it uniform in quality as supplied from day to day? (4) At what heat is it fed? (5) Does it contain the simple original grain-products—gluten, salts, etc.—or has there been added any chemical agent used in the manufacture of the alcoholic liquid? These inquiries are necessary, because the effect of swill when fresh may be entirely different from swill in an acid or decomposed state, and the allegation has also been made that injurious chemical agents are added. The temperature of the stables in which the experimental animals are housed should also be recorded. In short, every condition which is liable to enter as a factor into the problem should be intelligently regarded. Dr. Salmon advises that biological analyses of the milk should be made, in order to determine the relative number of germs as compared with milk from country pastures.

Hitherto chemical analysis has been mainly relied on in determining the quality of the milk; but, as Dr. Sturtevant remarks, "while this is of assistance, it cannot alone determine the questions relative to healthfulness. The question should be investigated from the chemico-physiological standpoint: determine whether substances not met with in ordinary foods can be traced through the animal to the milk; whether bacterial

germs exist in the food, and whether such can be traced through the animal to the milk; whether animals of a delicate nature will succumb, or show indication of disease, when fed with suspected milk, while other individuals thrive upon a milk considered of a fine quality. The development of ptomaines in feeding substances through neglect of proper precaution should also receive investigation, as a food otherwise useful may at times become dangerous on the neglect of ordinary precaution."

Dr. Salmon does not regard the studying of milk from healthy cattle, fed upon swill under favorable hygienic conditions, as of much value toward elucidating the practical questions involved. "The question," he says, "is not, whether a small quantity of cool and fresh swill fed with a suitably prepared ration of other articles of food to healthy cows, having clean roomy stables, and plenty of exercise, is injurious to the milk, but it is this: Is wholesome milk produced by feeding swill under the conditions in which it is fed in practice, and must be fed in order to make it a profitable industry?" And finally, as Professor Rohé so well expresses it, "a scientific solution of the question will not be furthered by prejudiced appeals or unreasoning denunciation. Patient investigation, keeping in view all circumstances of the question, and avoiding all one-sidedness in considering the matter, will alone bring about the object desired."

With these suggestions to those having in charge the experiment stations, we leave the subject with our readers. We shall be glad to record any observations or experiences which any one may send us in the future; so that, even if public interest cannot be sufficiently aroused to bring about a proper investigation of the subject at the present time, it may, by a reminder from time to time, be kept alive until the demand for such an inquiry becomes irresistible.

THE PROHIBITION OF POISONOUS COLORING MATERIALS.—Sweden has also passed laws against the use of poisonous coloring materials in goods for household use, such as woven fabrics, yarn, shades, sealing wax and wafers, wall paper, artificial flowers, blinds, etc.—*American Analyst.*

MR. RICHARD QUAIN.—This well known physician and writer on medical subjects, died at London, September 15, 1887, aged eighty-seven. He was one of the founders of the Pathological Society, President of University College, and a Fellow of the College of Surgeons. In addition to many contributions to medical journals, he published in 1844, Quain's *Anatomy of the Arteries of the Human Body*, a standard work in the English language. He was one of the first to draw attention to the pathology of fatty degeneration of the heart.

IN MEMORY OF DR. JOSEPH C. HUTCHISON.—At a meeting of the Medical Staff of the Brooklyn Hospital, September 24, 1887, the following minute was adopted:

The long and active connection of our friend and associate, the late Dr. Joseph C. Hutchison, with the Brooklyn Hospital, was characterized by earnest and unfaltering devotion to its interests. His preëminent professional skill, his large and varied experience, his conservative and accurate judgment, his genial manner and the inspiration of his native kindnesss and Christian manhood, were ever ready for his professional associates as well as for those who sought the shelter of this institution for help; and were ever intent on all suggestions that served to keep the Brooklyn Hospital first and most liberal among the charitable institutions of the city.

Contributing as he did by his dignified presence and his many graceful accomplishments to the adornment and advantage of the enterprise, culture, and benevolence of the city, the Brooklyn Hospital was nearer to his heart than any other, and to it were given his utmost care and the best of his gifts.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U. S. ARMY, FROM SEPTEMBER 27 TO OCTOBER 3, 1887.

SMITH, A. K., *Lieutenant-Colonel and Surgeon.*—Granted leave of absence for one month and fourteen days, to take effect upon his being relieved from duty at the U. S. Military Academy.—*S. O. 223, A. G. O.*, September 24, 1887.

DIETZ, W. D., *First Lieutenant and Assistant Surgeon.*—Leave of absence extended one month.—*S. O. 223, A. G. O.*, September 24, 1887.

KNUDLER, WILLIAM L., *First Lieutenant and Assistant Surgeon.*—Ordered to accompany Light Battery "F," Fourth Artillery, from Fort Snelling, Minnesota, to the International Military Encampment, at Chicago, Illinois.—*S. O. 97, Department of Dakota*, September 20, 1887.

CABELL, J. M., *First Lieutenant and Assistant Surgeon.*—Relieved from further duty in connection with the competition of the "Team of Distinguished Marksmen," at Bellevue Rifle Range, to take effect October 1, and will return to his station, Fort Omaha, Nebraska.—*S. O. 95, Department of the Platte*, September 27, 1887.

OFFICIAL LIST OF CHANGES IN THE MEDICAL CORPS OF THE U. S. NAVY FOR THE WEEK ENDING OCTOBER 1, 1887.

MEANS, V. C. B., *Assistant Surgeon.*—Ordered for examination preliminary to promotion.

DERR, E. Z., *Passed Assistant Surgeon.*—Detached from the Navy Yard, New York, and ordered to the "Nipsic."

ASHBRIDGE, RICHARD, *Passed Assistant Surgeon.*—Detached from the Naval Academy, Annapolis, Maryland, and wait orders.

RUSSELL, A. H., *Passed Assistant Surgeon.*—Ordered to the Naval Academy, Annapolis, Maryland.

HERNDON, C. G., *Passed Assistant Surgeon.*—Detached from the Naval Dispensary, at Washington, D. C., and ordered to the "Enterprise."

ARTHUR, GEORGE, *Passed Assistant Surgeon.*—Detached from the Museum of Hygiene, Washington, D. C., and ordered to the Naval Dispensary.

GRIFFITHS, S. H., *Passed Assistant Surgeon.*—Ordered to the Museum of Hygiene, Washington, D. C.

SPEAR, J. C., *Medical Inspector.*—Leave of absence granted until July 1, 1888, with permission to leave the United States.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*